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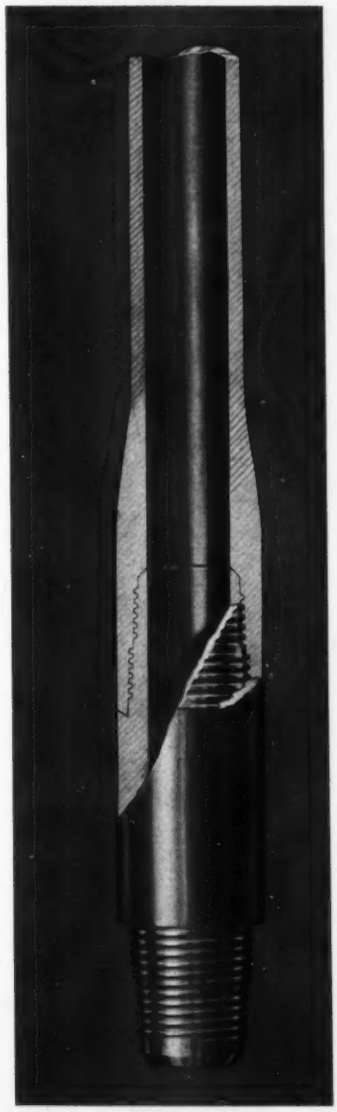

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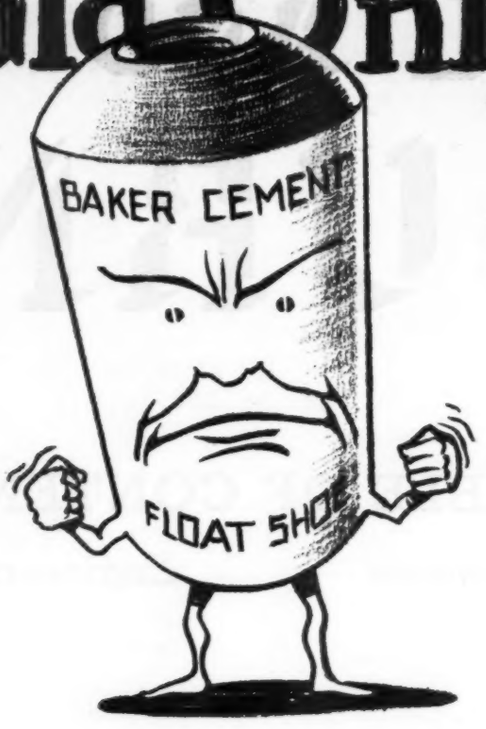
If I Could Only Talk



OUR whole outfit has been trying for years and years to tell you how good I am, and while a lot of other folks must have listened and been convinced, it seems that you, and you, and you don't know how good I really am.

Mister, let's have an understanding before ol' Lady Luck forgets to smile on you one of these days and you shoot a seven when your point was nine!

With no apologies whatever, I admit I'm plenty good. Other Float Shoes can't do what I can, and I'll tell you why ▲▲▲

In the first place, I'm strong—like my whole family—stronger than your casing, because I'm made of a special concrete and inside me there's a Bakelite ball which seals against rubber and Bakelite seats.

And, Mister, there's no foolin' about my holding tight against any pressure.

I let the cement pass down easily, but when the pumps stop, that floating Bakelite ball pops up against the rubber and Bakelite seats and your cement stays put.

But it's when you go to drill me out that I'm worth a carload of ordinary Float Shoes, Float Collars and Guide Shoes. I'm a strong, tough feller until the bit starts drilling thru me. Then I give up e-a-s-y, crumble to pieces and am soon in the slush pit ▲▲▲

▲▲▲and there you are, with the hole all ready for coring or drilling, without any cracks in your cement job and no chunks of metal left to hold up the bit or start a crooked hole.

There's more you ought to know, so why not ask Baker to send you all the dope? They'll send it free.

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Overall Picture of Situation Is Clouded by Present High Level of Production

By ANDREW M. ROWLEY

THE CRUDE OIL production situation at this time is characteristic of the anomalies of the petroleum industry. At the time of the year when output should decline a substantial increase in crude production is recorded. Labor Day is usually considered in the oil business as the end of the season of peak consumption and sound business principles dictate a curtailment of production both for crude oil and gasoline, from that date. Price structures for the fall and winter months depend largely on what course is pursued at this time by producers and refiners.

While total production figures should warn the industry of possible trouble unless more strict curtailment is made effective, an analysis of the situation shows more executives are worried about securing adequate supplies of crude oil for their requirements next year than about present production. Excess production at this time has a tendency to create an uncertainty regarding the future of price structures and certainly delays the announcement of better prices. But at the same time a number of companies are deeply concerned regarding adequate crude oil supplies for future operations and predict this condition will actually become acute in certain areas, notably Oklahoma and Kansas, next year.

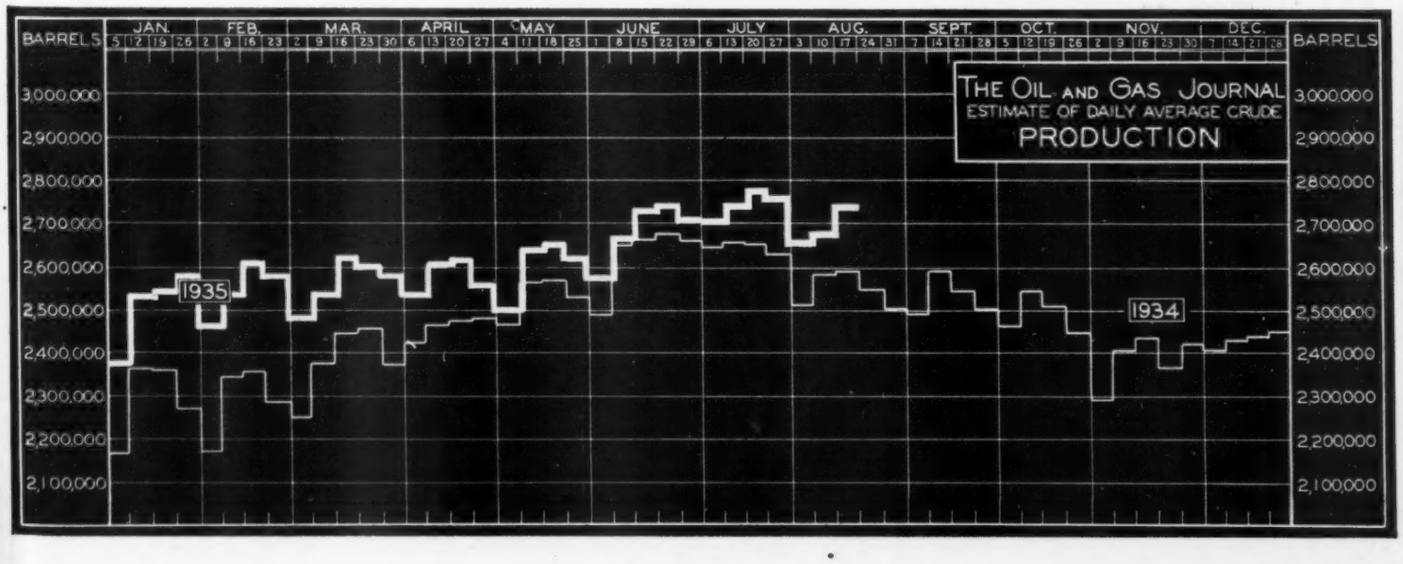
California and Louisiana account for the difference in production recorded last week and one year ago. Oklahoma and Texas both are producing less than they did a year ago, consequently there has been an unusual interest in the situation in California. It is rather interesting to note that two-thirds of the increase registered in California last week came from Kettleman Hills, a field generally regarded as being closely supervised.

The whole situation, when viewed from the standpoint of what has happened during the past three or four years, with increasing consumption, and the failure to discover major producing fields, is especially promising. Price structures have not reflected the full extent of the improvement which has taken place. Increases in production, such as recorded last week, do not change the fact that there is no excessive surplus available and that the industry has been drawing quite heavily upon its reserves for a long period. But better prices will not materialize until the present level of output is brought down to seasonal requirements.

Production 2,743,202, Increase 53,887

Estimated daily average production for the week ending August 17, a comparison with previous week and one year ago follows:

	Aug. 17	Aug. 10	Aug. 18, 1934
Oklahoma—			
Oklahoma City	145,875	144,925	174,950
Seminole-St. Louis	99,375	98,555	102,455
Remainder of State	259,400	252,890	239,835
Total Oklahoma	504,650	496,370	517,240
East Texas—			
Lathrop	163,583	160,076	203,150
Kilgore	157,320	152,127	148,975
Joiner	152,078	150,327	132,990
Total East Texas	472,981	462,530	485,115
West Texas	150,039	142,530	146,321
North Central Texas	82,685	89,405	93,579
Texas Panhandle	57,725	51,150	61,599
East Central Texas	47,443	46,988	53,536
Gulf Coast—Texas	186,798	182,684	176,792
Southwest Texas	57,785	57,203	59,824
Total State of Texas	1,055,456	1,032,490	1,076,757
Kansas	142,475	139,250	134,530
Louisiana—			
North Louisiana	25,535	27,075	24,760
Gulf Coast—Louisiana	118,850	117,350	70,495
Total Louisiana	144,385	144,425	95,255
Arkansas	30,305	30,465	31,855
Eastern Fields (except Michigan)	103,000	106,500	102,000
Michigan	47,141	42,245	29,024
Rocky Mountain area	105,790	108,320	98,230
California—			
Santa Fe Springs	41,850	41,850	41,500
Long Beach	79,750	79,000	67,000
Mountain View	34,700	33,000	7,000
Elwood	11,750	12,750	12,500
Kettleman Hills	75,000	61,250	62,000
Remainder of State	366,950	361,400	318,000
Total California	610,000	589,250	508,000
Total United States	2,743,202	2,689,315	2,592,891



The Bulletin Board

PIPE LINE FACILITIES are being provided for the Sam Fordyce Field in Hidalgo County, Southwest Texas, through the laying of a 5½-inch line between the field and terminal at deep water near Port Isabel on the mouth of the Rio Grande River. Construction work on this 88-mile system is now under way.

AUTOMOBILE REGISTRATION in the United States on June 30, including trucks and buses, was 4.1 per cent greater than on June 30, 1934, while the increase in the number of passenger cars, 3.8 per cent, was exactly the same as the gain in domestic consumption of gasoline during the first half of this year over the similar period of 1934.

GAS WASTE ELIMINATED during both the period of testing and production by application of modern engineering practice and use of high pressure equipment has been accomplished in handling a large volume and high pressure gas well near Oklahoma City oil field.

OIL LEGISLATION at this session of Congress is generally believed to be impossible owing to the rush for adjournment and the clash between the House committee and the Senate over the Connally and Cole bills. Minority of House committee opposes new board.

SHORTAGE OF PETROLEUM in the United States within a few years predicted before American Chemical Society at San Francisco by B. T. Brooks and L. C. Snider who foresee higher prices, larger imports and American motorists forced to resort to low powered cars.

DIESEL ENGINES driving direct current generators are successfully used in furnishing power for rotary rigs and materially reduce the cost of water and fuel for wildcat operations. These units are winning favor in the oil industry and their increased use is predicted.

PAINT PROBLEMS in the oil industry vary through a wide range of conditions and it is only by taking advantage of the work of paint chemists and selecting the particular kind of material best suited to each job that best results will be obtained.

NATURAL GAS STORAGE in underground reservoirs provides a satisfactory means of regulating variations between gas produced and gas consumed in the operation of natural gas systems.

NEW WATER-FLOODING project is under way in Clarendon Field, Warren County, Pennsylvania, after previous attempts at air and gas repressuring failed to give desired results. The project has been carefully worked out in all details.

EAST TEXAS OVERPRODUCTION is reported increasing from week to week. Probable that efforts will be made to attack regulatory law from new point. Connally law restricting interstate shipments being tested in federal court.

TEXAS PRORATION hearing before the Railroad Commission at Austin marked by proposed acreage times potential formula presented by engineer representing the larger companies who seek to have commission respect recent decision of the Texas Supreme Court on the spacing law.

Quo Vadis?

CRUDE AND GASOLINE CURTAILMENT
EXCESSIVE OUTPUT
LABOR DAY JUNCTION
RIGHT AHEAD
END OF TOURIST CONSUMPTION
PRODUCER
REFINER
—Drawn Exclusively for The Oil and Gas Journal.

New Oil Legislation in This Session Is Generally Believed to Be Impossible

By HUGH D. MALLON

OIL LEGISLATION AT THIS session of Congress is generally believed to have been killed with the summary passage by the Senate of the administration backed tax bill. The rush for adjournment by members will probably sound the death knell of an oil bill at this time.

The bill passed by the Senate ratifying the compact, limiting imports, and extending the Connally "hot" oil law is not acceptable to numerous members of the House who advocate the creation of a Federal Oil Board with broad inquisitorial powers and no regulating authority. This difference of opinion is expected to kill the prospects of the passage of even the ratification of the compact for the present year.

Representative William P. Cole, of Maryland, chairman of the special oil subcommittee in the House, is steadfastly opposed to the provisions of the Senate bill. He is pressing for the issuance of a special rule by the Rules Committee which will allow the consideration by the House of the bill introduced by him, under some form of gag rule. Members of the committee are loath to grant such a rule at this time, the allowance of such a request only delaying the time when Congress will be able to adjourn.

The House Committee on Interstate and Foreign Commerce which unanimously reported the Cole version of the oil bill to the House, stated in its report that the committee had delayed recommending any further legislation than the Connally law until this time because of the fact that the Senate had before it the Thomas Bill, which bill was on the calendar of the Senate. Anticipating action on this bill the House committee had refrained from recommending any bill until the action of the Senate on this bill was seen.

In view of the fact that the Senate has now acted, and considering that the subcommittee had made an extensive investigation and report on the oil industry in pursuance of a House resolution, as well as the fact that governors of several of the oil producing states had become actively interested in the promulgation and ratification by the states of the interstate oil compact, it is the consensus of the committee that comprehensive legislation be recommended at this time by the special oil subcommittee.

THE REPORT SAYS THE DELAY in requesting ratification could be attributed to a desire on the part of the President and others, including many members of Congress, to work out in some agreeable way a bill ratifying the compact and at the same time enact such other supplemental legislation as might be to the best interests of the oil industry. Conferences, letters, and telegrams, looking to this end have occupied a great part of the interim, the report states, while at the same time other members of Congress have refrained from introducing legislation with the hope the committee report might cover the ground.

Remarking on the compact the report states the opinion of the committee that "realizing the compact itself is not the strongest document of the kind that could be drawn, but that it is an initial effort on the part of the oil producing states to meet, in a constitutional way, the prevention of waste of this great resource and in that way the conservation thereof" it is therefore recommended that the compact be ratified.

The report continues with the statement that "the compact bespeaks an effort on the part of a number of states to meet a great problem which is peculiarly a state one and yet the magnitude of which flows over into every state of the union, thereby making it one of real national interest. The right of the states to handle and control the production end of this industry is one that the committee recognized and wants to encourage.

"The problem is not too big for the states if they sincerely want to solve it, at the same time it is not one which will tolerate abandonment or trifling by the states. The country as a whole has the right to demand that petroleum, a great God-given resource belonging as a whole to no state or individual, but a natural national resource, must be conserved and must not be wasted." For the states to so conserve and efficiently use their natural resources of oil, the committee says, the state must have the cooperative help of the Federal Government.

In support of this argument the committee cites in its report that if the same policy had been followed (the compact method dealing with Federal cooperation) much legislation heretofore passed by Congress dealing with the production of many commodities would not have been necessary. However, when the consent of Congress is given to an interstate compact, such as is included in the bill it becomes necessary that supplemental legislation be passed to assist the states, the report of the committee claims.

For this reason Representative Cole advocates the establishment of a board to administer the provisions of the law. The duties of the board, according to the report, make it advisable that a separate agency be set up, instead of having the act administered by "some bureau chief, or agency appointed by a Cabinet member without the approval of the President or the Senate."

IN DEFINING THE DUTIES of the board, the committee says: "Such duties present no encroachment whatever by the Federal Government upon the prerogatives of the States. The board is the agency of the entire country and not the agency of the producing states alone, which agency, however, is to cooperate in every helpful way with the interstate compact group in carrying out the purposes and objects set forth in the compact. The proposed board is to know, as near as possible, at all times, the status of petroleum reserves and sources of supply. It is to study and investigate the discovery and orderly development of all sources of supply and improved methods of production, as well as the possibility and the expense of repressuring existing fields. The importance of such information being in the possession of the Federal Government is too important to need any elaboration."

Remarking on the fact that the board would be called upon to make periodical forecasts of the amount of production from the various states to meet the reasonable national market demand, the report points out that these figures would be merely advisory. "This finding by a Federal agency has been pretty generally conceded by witnesses," the report states, continuing with the statement that it is the belief of the committee that the producing states will give serious consideration to the finding of the board in this connection in determining through the state conservation boards the amount of production which should be allowed in each of the producing states.

The provisions of the bill which set up the Federal board and enumerate the duties of the board have been under almost constant fire since it has become known it was the intention of the committee to recommend such legislation. Since that time there has been introduced and passed in the Senate, by unanimous consent, the bill introduced by Senator Thomas, but amended by Senator Connally, which does not provide for the establishment of any Federal agency. It merely ratifies the interstate oil compact limits imports, and extend permanently the Connally "hot" oil law.

Senator George, of Georgia, and Senator McAdoo, of California, objected to the passage of the Senate bill on the unanimous consent provision of the Senate rules, holding up the final enactment by the Senate for two days with motions to reconsider the vote, but these motions were both withdrawn and the bill has now gone to the House of Representatives for final action. It is expected that within the next few days House action will have been taken and the industry will know definitely what course it will be asked to pursue.

Statements of numerous members of the House indicate that these members favor the creation of Federal Oil Board as is provided for in the Cole bill, but the attitude of several Senators, which will be a deciding factor in the final analysis, is that there are at present too many boards, commissions, bureaus and administrations. Addition of any more is frowned upon by them, they regarding it merely as an extension of a bureaucratic form of government which should be discouraged. Senator Connally is thoroughly opposed to the appointment of such a board as is Senator Gore. If the House passes a bill with provision for the board in it, it is fairly certain that both of these Senators will object to its acceptance.

The minority views of Representatives Mapes, Cooper, Holmes and Merritt, all on the Interstate Commerce Committee, coincide with the provisions of the Senate Bill that there should not be any addition to the growing number of Federal agencies. Representative Mapes is a member of the special oil subcommittee of the Interstate Commerce Committee.

While Mr. Mapes is not certain as to the course which he will pursue when the bill comes up for debate on the floor of the House it is almost certain he will introduce an amendment which will delete the provisions for the creation of the board. The four members of the committee voiced their opinion of the establishment of the board in the following terms:

"It means another board with the usual consequences and additional expense and is, in our opinion, wholly necessary. All necessary work that the bill proposes to have the board do is now done by the Bureau of Mines in the Department of Interior, or can be done by it with little, if any, addition to its personnel."

THESE FOUR MEMBERS ARE opposed to the provision which would allow industrial agreements, on a voluntary basis, with a relaxation of the antitrust laws to permit the operation of such agreements. The argument used by the group against such agreements was that "a similar provision in the Recovery Act and its application to the codes was not such as to commend its application to the petroleum industry."

With Congress looking forward to adjournment it is probable the oil legislation will be lost in the final shuffle. If this happens, and Congress adjourns without enacting any oil legislation it is confidently expected the guns of proponents of Federal regulation will be trained on the next session of Congress. At all events, it is certain that the next session will be a lively one for oil.

Plugging Old Wells

Secretary Ickes has allotted $125,000 of old PWA funds to the U. S. Geological Survey to repair abandoned test holes and oil wells and to improve water wells in 10 western states. Work will be done on federal and Indian lands so that they may be used again despite drilling of wells. The states are Arizona, California, Montana, Utah, Wyoming, Idaho, Michigan, Oklahoma, Colorado.

Passenger Car Registration Has Same Increase as Gasoline Consumption

PASSENGER AUTOMOBILE registration in the United States during the first six months of this year shows exactly the same percentage of increase over the first half of 1934 as did the domestic consumption of gasoline, each registering a gain of 3.8 per cent. Total registration of all motor vehicles, exclusive of motorcycles, but including passenger cars, trucks and buses, on June 30 of this year was 4.1 per cent greater than on June 30, 1934, and totaled 23,164,739. Peak registration of motor vehicles was in 1930 with a total of 26,545,281. However, that figure was the total at the end of the year and the figure given above for the first half of this year will be increased appreciably by December 31 as many cars are registered during the last six months of the year.

Registration of motor trucks showed the greatest percentage increase this year as compared to the first six months of 1934, the gain up to June 30 of this year being 6⅔ per cent over the similar period of 1934. Figures on motor bus registration do not lend themselves to a fair comparison as many states include buses in registration of passenger cars and others in the figures for trucks.

Of especial interest as showing the extent of the gain in motor vehicle registration this year is the fact only two states out of the 48 states and the District of Columbia failed to show a gain during the first six months of this year as compared to the first half of 1934. Quite frequently in the past different areas or sections have shown substantial gains which were offset to a great extent by losses in registration in a number of states but the increase recorded this year is spread fairly evenly throughout the entire country. Figures for Texas and Missouri show these two states did not reach the registration figure, for passenger cars, this year on June 30 that was recorded on June 30, 1934. However, Texas showed a good gain in registration of trucks and of buses this year as compared to the first half of 1934.

While the increase in gasoline consumption was exactly the same as the gain in passenger car registration, the additional registration, including a larger percentage than usual of new cars, according to figures on passenger car sales, is expected to exert a greater influence on consumption over the remainder of this year than it did during the first six months. This is due to two reasons, first that the new cars, being faster, cover a greater territory and are being used more frequently for long trips; and second, because during the hot weather this year many car owners, for the first time in years, used the railroads for travel because of air-conditioned trains.

Throughout the United States many men who had always used their automobiles for business trips got into the habit of traveling by train because of the heat and the fact most trains carried air-conditioned cars. With the advent of cooler weather, it is expected these men will go back to the use of their own cars. With the newer cars capable of averaging around 50 miles an hour the time involved in making long trips has been reduced to such an extent more people are using their automobiles for trips they formerly dreaded because of distance and time required to drive. These factors are expected to maintain gasoline consumption at a level which will break all previous records in the United States and which will come very close to breaking the peak record for total demand, including domestic consumption and exports, established in 1930.

Increasing use of motor vehicles registered is shown by the figures on gasoline consumption. The high record, up to this year, for gasoline consumption in the United States was in 1931 when there was a total of 25,832,884 motor vehicles registered. Domestic consumption this year is running about 4.2 per cent above 1931, although there are 2,668,145 less cars registered than during the year 1931. Registration figures for the first half of 1931 were at a higher level than the whole year figure because registrations during 1931 showed a decline from the 1930 figure.

More paved roads have been a big factor in increasing travel by automobile and these better roads with the many improvements made in automobiles, giving greater comfort and permitting faster travel, have extended the sphere of travel of the ordinary family. This is shown in figures on increases in consumption and the establishment of a new peak in domestic demand this year even though there are far less cars registered than in 1931. Where only a comparatively short time ago a trip to a point 500 miles away was regarded as a long journey by automobile, present day cars permit traveling that distance in a day without trouble or much discomfort.

Motor Vehicle Registration in United States

	Passenger cars		Trucks		Motor buses	
	June 30, 1935	June 30, 1934	June 30, 1935	June 30, 1934	June 30, 1935	June 30, 1934
Alabama	190,736	177,979	35,468	31,137	836	737
Arizona	76,981	73,334	16,038	15,215	297	262
Arkansas	146,100	140,566	29,036	25,921	(*)	(*)
California	1,870,623	1,784,693	120,107	105,227	(*)	(*)
Colorado	230,920	227,927	22,202	22,588	(*)	(*)
Connecticut	275,484	266,057	44,391	43,192	814	774
Delaware	42,806	41,116	8,555	8,271	(†)	(†)
District of Columbia	146,483	131,935	15,826	15,233	779	641
Florida	270,192	255,426	50,069	48,793	400	411
Georgia	304,695	295,472	58,980	54,707	(*)	(*)
Idaho	81,270	78,156	14,462	12,473	(*)	(*)
Illinois	1,227,404	1,176,996	171,161	158,635	(†)	(†)
Indiana	658,060	627,023	108,511	102,654	840	850
Iowa	578,945	565,780	72,852	69,500	(*)	(*)
Kansas	432,940	416,076	71,052	67,240	(†)	(†)
Kentucky	274,685	257,965	36,882	30,137	224	203
Louisiana	190,279	174,334	51,994	37,685	1,463	1,450
Maine	126,800	126,578	30,717	30,456	(*)	(*)
Maryland	263,549	257,782	41,628	37,935	730	599
Massachusetts	722,734	712,158	100,083	97,780	4,182	3,884
Michigan	732,044	661,051	67,964	60,437	(†)	(†)
Minnesota	576,071	564,674	97,905	92,461	124	80
Mississippi	138,890	128,182	29,487	28,931	483	389
Missouri	581,177	598,663	96,128	97,514	(†)	(†)
Montana	92,776	86,754	38,148	31,087	(†)	(†)
Nebraska	302,595	300,126	47,152	43,775	133	111
Nevada	24,568	22,899	5,715	5,320	(*)	(*)
New Hampshire	84,965	83,929	19,737	19,581	(†)	(†)
New Jersey	689,159	670,210	112,154	110,513	4,757	4,668
New Mexico	63,258	58,354	14,048	12,448	278	240
New York	1,704,112	1,669,203	264,597	256,532	28,314	28,923
North Carolina	344,115	314,787	50,647	49,665	(*)	(*)
North Dakota	122,138	120,115	23,898	22,579	61	49
Ohio	1,378,065	1,339,406	140,655	136,109	(*)	(*)
Oklahoma	372,382	367,219	67,414	62,540	1,554	1,404
Oregon	250,616	234,941	22,408	21,527	580	680
Pennsylvania	1,408,987	1,368,331	225,548	219,902	5,391	5,479
Rhode Island	117,347	112,300	17,540	17,265	200	222
South Carolina	192,441	169,742	26,799	21,453	(*)	(*)
South Dakota	138,900	134,024	22,801	20,209	43	61
Tennessee	276,920	258,362	35,024	30,734	1,564	1,463
Texas	926,534	920,131	188,143	175,377	2,178	2,051
Utah	84,589	81,160	16,502	15,603	496	442
Vermont	61,954	60,047	7,780	7,366	85	82
Virginia	277,025	271,651	38,995	38,270	481	400
Washington	352,494	309,674	55,526	44,593	1,052	915
West Virginia	172,488	166,978	29,070	27,253		
Wisconsin	568,935	537,800	35,821	33,397	436	443
Wyoming	49,197	47,151	11,916	10,920	(*)	(*)
Total	20,196,428	19,454,207	2,909,536	2,728,140	58,775	57,913

* Included in passenger cars. †Included in trucks.

Proposed Acreage-Potential Formula Is Controversial Point at Texas Hearing

AS TESTIMONY BEFORE THE Railroad Commission at Austin over revision in the well-spacing rules in view of the recent Supreme Court decision broadened out, the commission Tuesday night recessed its statewide oil proration hearing until next Monday and announced further testimony will be heard. Chairman Ernest O. Thompson announced the commission wi'l withhold new orders prescribing allowables for any field before Monday.

Representatives of major firms and large oil operators reiterated their insistence Tuesday upon adoption of the acreage basis as a partial factor, rather than leaving determination solely to well potential. They insisted exceptions should continue to be granted for small tracts.

Outside the hearing room reports gained headway that if an acreage factor is embodied in the new order, likely the basis spacing will be reduced back to the old 150 and 300 feet, so as to give an earlier start for the small tracts before exceptions would be required.

Oil companies filed a motion that the commission modify its next order to include acreage along with well potential in East Texas and "insure to each operator an equal opportunity to recover oil under his land." They reiterated past orders of the commission were in conflict with the recent Supreme Court decision.

Francis E. Heath, Fort Worth, Sun Oil Co. petroleum engineer, testified further on a formula to solve the question. He defined it as "acreage multiplied by potential."

DURING THE DISCUSSION of considering acreage as well as potential Colonel Thompson, chairman of the commission, said it intended to follow the law, but would not countenance any plan which would "drive the little man out of business."

"The commission certainly is going to follow the statutes religiously and the mandate of the court," Chairman Thompson said. "We realize our activities are circumscribed. But we are not going to stand for any 'share the wealth' plan which would give the property of the little man to monopolistic interests. This commission does not believe that the legislature, the laws or the courts meant to drive the little man from business."

The case of those advocating including acreage as a basis of allocating production of oil in East Texas was presented by R. E. Hardwicke and Hines Baker, through Mr. Heath's testimony and statements to the commission.

They maintained that the Supreme Court, in the case of Brown vs. the Humble company, held the commission must consider acreage to protect property rights, that it was physically feasible to consider it, and that the commission had not been so doing in its administration.

Admitting that marginal wells and wells on very small tracts would be at a disadvantage under such a system, they argued it would care equitably for all but a very small per cent of tract owners and operators.

Mr. Baker developed from Mr. Heath there were approximately 160 marginal wells in East Texas, that is, wells unable to pump more than 20 bbls. daily, and that they were located on relatively large tracts. Mr. Heath figured their average production at about 13 bbls. daily, or about 2,100 bbls. total.

Opponents of the proposal declared it would result in shutting down hundreds of wells, stop drilling and cause unemployment.

"Do you and the people you represent really recommend this course to the commission?" asked Carl Callaway.

"I cannot speak for the others, but I recommend it myself as engineeringly sound," Mr. Heath replied.

Mr. Heath, questioned by Mr. Hardwicke, testified allocation of production by potential only, as at present, did not permit lease owners to recover their just share of oil. He said other things being equal, a man having a tract twice the size of another should have twice the production. Members of the commission, by their questions, indicated disagreement.

Mr. Heath cited figures that 299 wells were on tracts of less than 1 acre to a well, 403 on less than 2 acres, 782 on less than 3 acres, 781 on less than 4 acres, and 188 on less than 5 acres. These figures were given to show the irregularity of the drilling pattern in the East Texas Field.

He testified that the average density was 1 well to 3.2 acres as computed from a total of 3,263 wells on 1,237 leases and said the formula for determining allowable of a well should be "acreage times potential."

The commission was told by Mr. Hardwicke that the Supreme Court had held that where the regular spacing rule of 1 well to 10 acres had been broken by exceptions, compensation must be provided through adjustment of the allowable.

Chairman Thompson questioned Mr. Heath as to a conference of oil company representatives prior to the hearing at which the proposed new proration plan was discussed. Mr. Heath named men he said were employed by the Sun, the Humble and the Shell companies.

When Mr. Heath had testified that under his formula 1 well on 1 acre could produce 2.9 bbls. a day, Chairman Thompson asked:

"Would you call that regulation or confiscation?"

"No, it would be conservation," Mr. Heath said.

Mr. Hardwicke interposed:

"But it also would mean confiscation of the oil owned by others if 1 well on 1 acre was allowed to produce more than its share of the oil, wouldn't it?" Mr. Heath replied affirmatively. Mr. Heath also declared that the many exceptions to Rule 73 granted by the commission permitted wells which drained oil from surrounding tracts.

JOHN BOYLE, REPRESENTING the state mineral board, cross-examined to show this would cause the state to break faith with hundreds of operators whom it had compelled to drill offset wells on public lands. Mr. Boyle attempted to show that Mr. Heath's plan would destroy taxable values of oil properties which would result in losses to the school fund and would have to be made up elsewhere. The state school fund is the beneficiary of many wells in the Sabine River bottom on small tracts, and Governor Allred, as chairman of the board, has strongly opposed allocating production on acreage.

F. W. Fisher, attorney of Tyler, attacked the acreage plan, maintaining, among other things, that it was impossible to determine accurately the amount of oil under a tract. He also argued that the greater the amount of drilling the greater would be the ultimate recovery of oil. Mr. Fisher said the whole theory was based on the claim the amount of oil underlaying a tract could be determined from well corings.

Considering Panhandle gas, Gordon Griffin, chief petroleum engineer of the commission, recommended a gas-oil ratio of 12,000 feet for the field. Nominations for ratable takings of sweet gas from the West Panhandle Field for September were announced as 435,000,000 feet, and for the East Panhandle Field as 138,244,000 feet. Representatives of several companies were questioned as to the amount of their nominations for August and the amount actually taken.

Chairman Thompson said a study of nominations and takings indicated the possibility large nominations had been made to create a fictitious figure for the market demand, thereby increasing the allowable and defeating the purpose of the new gas proration law.

Announcing reservoir pressure in East Texas had declined less than 2 pounds in the last month, Gordon Griffin, the commission's petroleum engineer, said recommendation had been made that no change be made in the allowable factor.

New Oil Burner Institute Elects C. H. Porter as Manager

Organization plans in connection with the formation of the Oil Burner Institute around which the activities of the oil burner manufacturers will function in the future, have been completed. The

C. HARVEY PORTER

institute will shortly move its offices to 30 Rockefeller Plaza, New York, where its permanent headquarters will be located.

"The central and major objective of the O.B.I. is to increase the markets, through general public acceptance of oil as a fuel, for oil-burning appliances," according to W. J. Smith, president of the American Oil Burner Association, Inc. "Designs of the O.B.I. Seal of Approval are being made and an announcement of the design selected will be made at an early date. An economic and market survey is being made. With the market survey in hand the institute plans to study sound methods of securing national publicity to increase sales of oil-burning appliances."

C. Harvey Porter, who is connected with the Industrial Corp. of Baltimore, has been engaged as managing director and C. F. Curtin as assistant secretary and treasurer.

Prophesy Oil Shortage in Few Years, Higher Prices, Low-Powered Cars

THAT THE UNITED STATES is in "imminent" danger of a petroleum shortage which will swell imports, send up prices of motor fuel, and force a more general use of small, low-powered cars, with far-reaching effect on the automobile and allied industries, was asserted in a report made public by American Chemical Society at its ninetieth meeting held in San Francisco, Calif.

"There never has been any question but that some time our petroleum supply would approach exhaustion," says the report prepared by Dr. Benjamin T. Brooks, consulting chemical engineer, and L. C. Snider, geologist, of Henry L. Doherty & Co., both of New York.

"But long before the extreme condition of exhaustion is reached we shall experience a shortage of petroleum. The essence of the question is when a shortage will be reached. We believe that there are now sufficient facts to give a reasonable answer to that question. There is abundant evidence that we may expect a shortage of petroleum sufficient to necessitate a marked increase in our imports and a considerable increase in the petroleum price structure within five to eight years.

"The statement of our reserves in terms of years' supply, such as 10 or 12 years, is highly misleading as indicating that no concern need be felt until near the end of that period, whereas we shall need a new supply of considerable magnitude in about five years no matter whether our proved reserves are equivalent to 10 or 15 years' supply. A shortage may develop within two or three years should the consumption increase."

FOLLOWING A PERIOD OF increasing imports and higher prices for petroleum products a point will be reached when substitutes such as shale oil and oil made from coal by hydrogenation will begin to compete with natural petroleum, according to the report, which points out that the latter process is operating on a small industrial scale in England under the protection of a special high tax on petroleum products.

"We are still in the midst of a period of abundant supply and low priced petroleum, motor fuel, lubricants, etc., which make possible the relatively high motor fuel tax," the report continues. "We shall continue to have motor fuel and lubricants for many years, but at prices much higher than anything we have known heretofore.

"The manufacture of shale oil from the shale of Colorado, Utah, and Wyoming can hardly check the rise in petroleum prices until the price of average crude has attained a level two and one-half to three times the present price of crude oil, and then only after the shortage has lasted several years. Several billions of dollars would be required even assuming that most of the refining and distribution equipment of the petroleum industry would be utilized.

"Increasing petroleum imports will result in greater dependence upon our navy and air force to prevent the serious dislocation of industry which would result if such imports were to be interrupted. The manufacture of substitutes, such as shale oil or oil made by the hydrogenation of coal, could not possibly be developed quickly enough to be of importance in a national emergency such as war, which would be settled one way or another long before any large part of our gasoline demand could be supplied from the auxiliary sources.

"The amount of our reserves is fairly accurately known and is believed to be 10,000,000,000 to 12,000,000,000 bbls. Although this would be equivalent to about two or 14 years' supply, producing fields rapidly decline but continue to produce small amounts of oil by pumping for many years. Shortage will accordingly be experienced many years before exhaustion.

"The magnitude of the oil reserves in foreign fields is not known as accurately as is our own, but much of our petroleum requirement will, within a few years, come from South America and possibly Russia and Persia.

"Increased efficiency in the utilization of petroleum or the manufacture of substitutes, already mentioned, will naturally affect the stringency of a shortage, but will not prevent one. Higher prices for motor fuel and lubricants will probably favor very light economical automobiles. Diesel oil motors for automobiles, trucks and buses will supplement but not displace gasoline.

"Alcohol as a motor fuel is a question of politics and farm subsidies, not an economic question. The Federal Oil Conservation Board has clearly shown that alcohol is not an economic substitute for gasoline except at price levels for gasoline about five times the refinery cost of gasoline during the last five years. Advocates of alcohol and Diesel motor fuel seldom take into account the distribution and filling station costs and taxes on gasoline.

"The higher petroleum prices to be expected a few years hence will curtail the use of lower priced petroleum products, such as fuel oil, kerosene, furnace oil and gas oil. Ultimately the lower value products will have to be strictly conserved for such products as motor fuel and lubricants.

"Any attempt at effective conservation of petroleum that would result in prices higher than those to which we are accustomed would probably be generally interpreted as favoring the industry at the expense of the consumer and would be a tough subject for planned economy. The prospect appears to be a continuation of the low prices and conditions of production and refining, rapidly depleting our reserves, until the indicated shortage materializes."

The report points out that every estimate of total possible future production of crude petroleum in the United States made by qualified authorities up to the year 1925 has been exceeded by actual production, in addition to which we have a future reserve of 10,000,000,000 bbls.

"These facts," it is added, "have tended to discredit the professional opinions of petroleum geologists and have created an entirely unfounded and unscientific widespread belief that oil would continue to be 'found.' However, many more facts are known today than when the earlier estimates were made.

"Exports, particularly of refined products, are generally considered a legitimate part of any business. If exports are included in the total demand we find that the domestic supply of crude petroleum in the United States has been insufficient to meet the total demand for 20 years, with one exception, and the deficiency has been made up by imports. During the last nine years the net deficiency has been more than 500,000,000 bbls.

"Current estimates of proved reserves vary from about 10,000,000,000 to 15,000,000,000 bbls. According to Wallace Pratt, the known reserves of petroleum producible by known methods, are located as follows: Oklahoma, 1,000,000,000 bbls.; California, 3,500,000,000 bbls.; Texas 3,500,000,000 bbls.; all other, 2,000,000,000 bbls.

"ONLY THREE STATES, ARKANSAS, New Mexico and Montana, have been added to the productive states in 25 years, and neither the present production nor the proved reserve of these states is important from the national standpoint. The only important producing areas which have been added in the older producing states are the Panhandle in Texas, and the West Texas-Southeast New Mexico district.

"Fields which would double the combined present production of Indiana, Illinois, Kentucky, Ohio, West Virginia, and Montana would be negligible from the national standpoint and the combined increase would not equal the normal decline in one or two years of a single flush field in Texas or Oklahoma.

"The outlines of the probably productive areas in California are drawn today practically as they were 20 years ago. Ventura Avenue in 1925 and Kettleman Hills in 1929 are the only contributions from this state in recent years which now appear to be of great importance.

"In view of the facts, there is no assurance that the proved and unproved reserves are large enough, or that new discoveries will be provide production fast enough to maintain the present position of our petroleum industry.

"The supply of petroleum has been more effective in controlling the price than the price has been in controlling the supply. The effect of price on production has been very remote. High price levels will increase somewhat the amount of petroleum recovered in the later stages of the productive life of the fields.

"Relatively abundant foreign supplies of petroleum with a shortage of our own supply will certainly tend to raise our prices for petroleum products in relation to prices in other countries and finally bring our prices up to or above theirs. High price levels will certainly cause a shift in the proportions of the principal refinery products, the products of lower value becoming more and more restricted in use with advancing prices. More and more fuel and gas oil will have to be cracked.

"If the cost of gasoline becomes high enough to consider any of the substitutes already mentioned, the use of small, low powered automobiles will be favored which would reduce the gasoline requirement and would have far-reaching effects on the automobile and allied industries."

Left, A. H. DeFriest, vice president and general sales manager, General Petroleum Corp., and W. H. Correa, general manager lubrication department, Socony-Vacuum Co.

New Pipe Line Systems for Western Kansas Oil Fields Now Considered

WICHITA, Kans., Aug. 20.—Realizing the necessity of increased pipe line outlets from western Kansas to take care of new wells and to permit of the further exploration of a large area passed upon favorably by geologists upon which leases have been acquired since 1933 there have been plans for a co-operative pipe line company.

One company with large interests in this section has made a very extensive survey of the situation and a short time ago called a meeting of the executives of about 10 other companies interested in this area for the purpose of discussing this particular problem.

It is understood this project contemplated the utilization of the three major pipe lines now extending part way into west Kansas as trunk lines to deliver the oil to Valley Center, Kans. At that point several pipe lines converge and it would be possible at nominal cost to distribute this oil to the allied companies to be carried by them to their refineries in and out of the State.

This project contemplated the extension of the gathering systems to the north, central and southern portions of west Kansas and serving about 12 new areas opened this year by wildcat wells and other new wells as opened. These gathering systems would take on the aspects of major pipe lines as it would be necessary to extend some of them, in time, to the Colorado State line and perhaps beyond if development now under way in eastern Colorado discovers oil in commercial quantities.

This original project has not made much headway but two other meetings of executives have been held in Tulsa recently to consider other means of organizing a co-operative pipe line company and financing the deal.

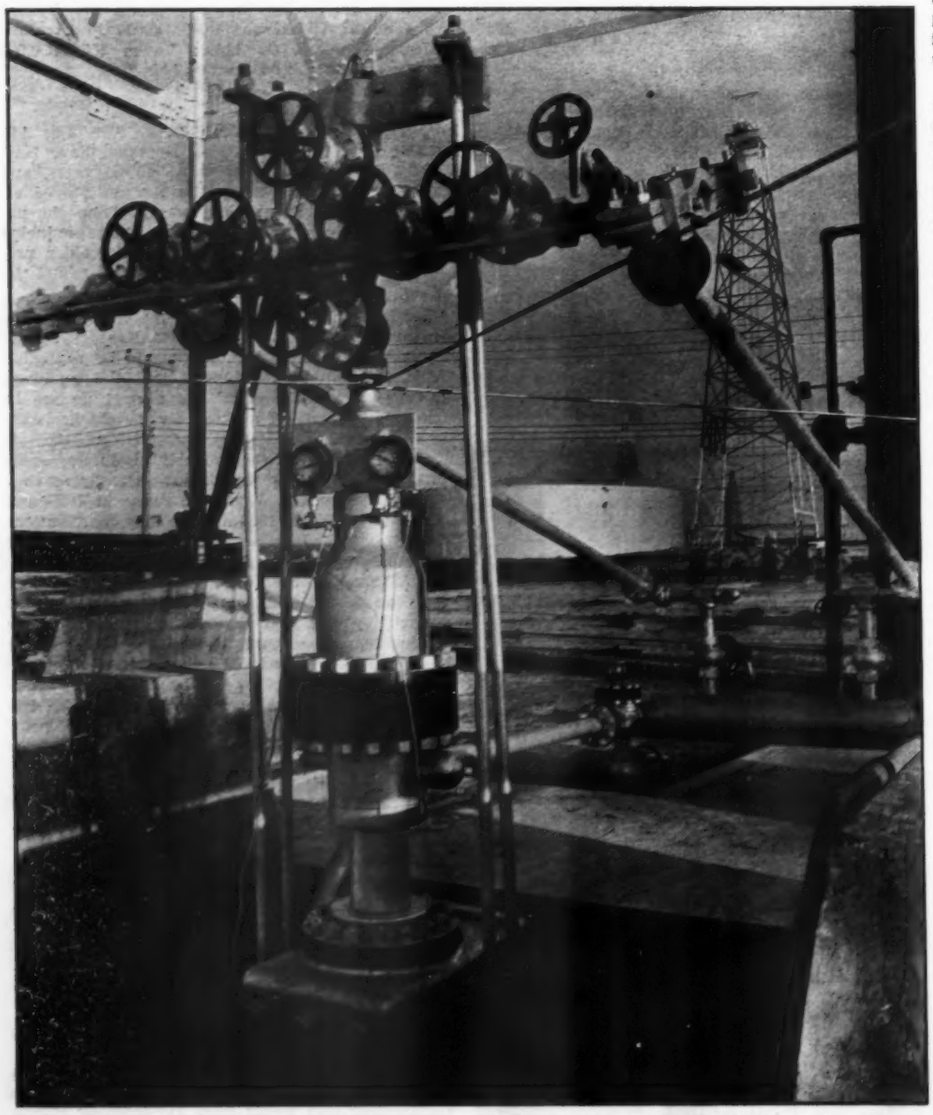
While it is not possible at this time to state what form this proposal may assume it is believed something tangible will develop and western Kansas will be afforded relief from the present condition which has materially slowed up development of acreage and the drilling of additional wells in areas already proved by at least one well.

Some of the companies interested in the development of western Kansas are Atlantic Oil Producing Co., Continental Oil Co., Empire Oil & Refining Co., Gypsy Oil Co., Magnolia Petroleum Co., Phillips Petroleum Co., Skelly Oil Co., Shell Petroleum Corp., Sinclair Prairie Oil Co., Stanolind Oil & Gas Co. and Texas Co.

It was further reported a 12-inch pipe line may be built from Valley Center, north of Wichita in Sedgwick County, to Humboldt in Allen County on the eastern side of the State. From there a 10-inch line may be laid to Sheldon, Mo., where Texas-Empire Pipe Line Co. has a main trunk line running to the east.

Since the original idea has not been accepted it is understood two groups of operators are considering separate lines. One group is to be composed of Texas-Empire Pipe Line Co. and Magnolia Pipe Line Co. A line would be extended from the Texas-Empire terminal in Eldorado Field into western Kansas and the oil delivered jointly to the Magnolia refinery at Augusta, Kans., and Empire Oil & Refining Co. to be carried into the new lines to Sheldon, Mo.

The other group suggested is composed of Gypsy Oil Co., represented by Gulf Pipe Line Co., Shell Petroleum Corp. and Skelly Pipe Line Co. and this new combination would utilize the present Skelly line to Cunningham Field in Kingman County, and build an extension to western Kansas from a point near Partridge in Reno County. The oil secured by this new line would be delivered to the Skelly terminal at Eldorado and divided. The Shell Petroleum Corp. refinery at Arkansas City, Kans., would receive part of it and the Gulf Pipe Line Co. another portion for delivery into their main trunk at Yale, Okla., through a line they already have from Kansas to that point.



High pressure hook-up on one of the deep wells in the Big Lake Field, Big Lake, Texas

Group Rules Are Interpreted by Federal Trade Commission

A statement has been issued by the Federal Trade Commission in explanation of Group 1 and Group 2 rules which may be incorporated in trade practice conference rules or agreements approved by the commission, many of which are now in process of negotiation with various branches of industry. The commission's statement in explanation of Group 1 and Group 2 rules is as follows:

"GROUP 1 RULES—The unfair trade practices which are embraced in Group 1 rules are considered to be unfair methods of competition within the decisions of the Federal Trade Commission and the courts, and appropriate proceedings in the public interest will be taken by the commission to prevent the use of such unlawful practices in or directly affecting interstate commerce.

"GROUP 2 RULES—The trade practices embraced in Group 2 rules do not, per se, constitute violations of law. They are considered by the industry either to be unethical, uneconomical or otherwise objectionable; or to be conducive to sound business methods which the industry desires to encourage and promote. Such rules, when they conform to the above specifications and are not violative of law, will be received by the commission, but the observance of said rules must depend upon and be accomplished through the co-operation of the members of the industry concerned, exercised in accordance with existing law. Where, however, such practices are used in such manner as to become unfair methods of competition in commerce or a violation of any law over which the commission has jurisdiction, appropriate proceedings will be instituted by the commission as in the case of violation of Group 1 rules."

Application of approximately 40 industries for trade practice agreements, filed with the commission or referred to it by the National Recovery Administration, are now being considered by the commission. In addition, a large number of inquiries as to the procedure necessary to be followed in order to negotiate such agreements have been received by the commission.

Spacing Rule Test

HOUSTON, Tex., Aug. 19.—Federal District Judge T. M. Kennerly Monday set August 30 as the date for a three-judge hearing on a suit by the Tysco Oil Co., Dallas, attacking the validity of a Texas Railroad Commission order limiting drilling in the new South Houston oil field to one well to every 16 acres.

Circuit Judge Joseph C. Hutcheson and District Judges Kennerly and R. McMillan of San Antonio will hold the hearing here. The company is seeking to compel the commission to permit the drilling of a well on its lease of approximately eight acres.

New Oil Field Opened in El Segundo After Years of Intensive Exploration

By L. P. STOCKMAN

AFTER SEVERAL YEARS OF intensive exploration with negative results it appears possible that the Republic Petroleum Co. will open up a new oil field in the El Segundo area of Los Angeles Basin. The company's No. 1 El Segundo in Section 18-3-14 has shown promise of being a commercial producer. The procedure adopted for the primary test had not been used before in California so far as is known. No. 1 El Segundo was bottomed in schist at 7,405 feet and topped the conglomerate at 7,308 feet. The conglomerate is practically identical with that cored in wells in the older section of the Playa Del Rey Field and showed other similar characteristics.

The Republic Petroleum Co.'s new wildcat has a 13⅜-inch surface string landed and cemented at 1,004 feet. Under ordinary conditions the next step would have been to run in and cement a water string above the formation carrying production possibilities, and the well then finished with either a full flow string or a perforated liner. Because of the unknown possibilities of this wildcat and the desire to dispense with the use of a string of casing for a water string the company ran in a 7-inch perforated liner and landed it on bottom. This left the hole open between 1,004 feet and the top of the liner. The company then ran in a formation tester with a packer set just above the top of the liner at 7,110 feet. The tester was left open for a period of 32 minutes. This packer proved adequate and accomplished the same result that would have been performed had the usual method of landing a water string been adopted.

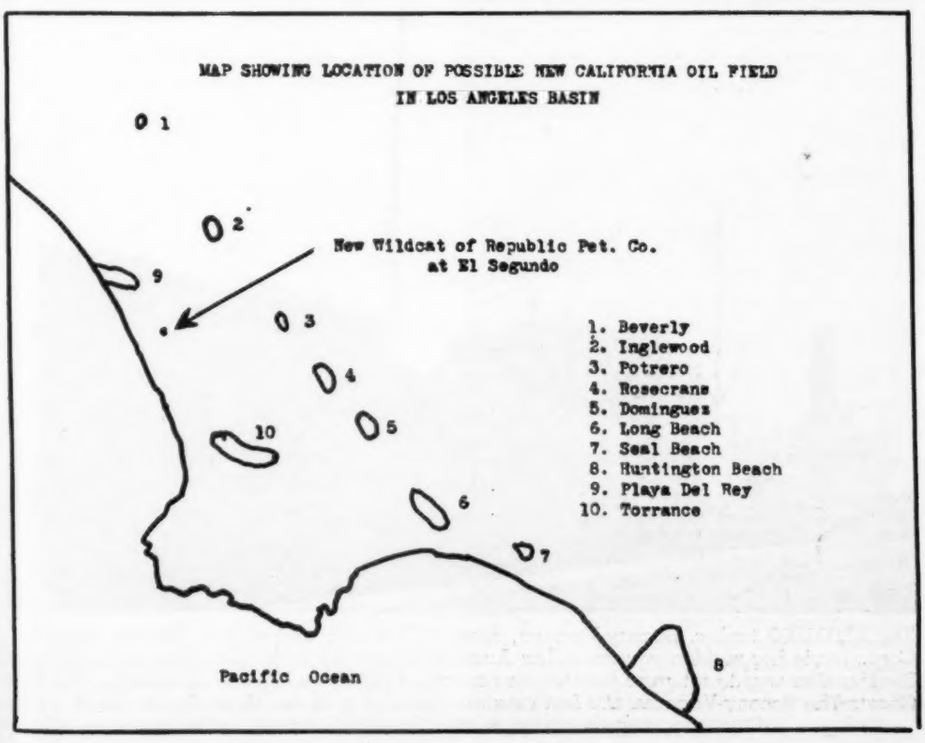
This formation test resulted in the recovery of 42 stands of mud, gas and oil. The well blew gas, drilling mud and some oil several times within a period of three hours on August 14 as the crew pulled out the drill pipe. The bottom stands showed more oil and less gas, but during the three-hour period it is estimated that the well blew for an aggregate of 30 minutes at frequent intervals as the drill pipe was removed from the hole. The oil appears to be sweet and although the quantity brought up was small it was the general belief that it would average somewhere between 22 and 25 gravity. This would place it a little higher than the range of oil produced in Playa Del Rey.

The prospective field is about 1 mile southeast of El Segundo, 5 miles southeast of the Playa Del Rey Field and 20 miles southwest of Los Angeles. The area presents an interesting study owing to the proximity of the Lawndale Field and a series of dry holes drilled several years ago in the Hawthorne area about 2 miles away. The No. 1 El Segundo is on a 100-acre lease and is surrounded by acreage held by Universal Consolidated, Ohio Oil Co., George F. Getty and the Texas Co. The Universal's 80-acre lease is between the Republic Petroleum's wildcat and producing wells in the Lawndale Field. Ohio Oil Co. has 160 acres and Texas Co. 80. Both contributed dry hole money.

The preliminary production test was witnessed by a small group including Ed. Stearns, of the Universal Consolidated Oil Co.; Earl Noble, of the Union Oil Co.; Bill Jarvis, of the Texas Co., and a few others. Drilling operations were under supervision of Harry Maddren, general superintendent, and Ham Hamilton, field superintendent, and both were pleased with the well's showing. It is the present intention to ream the hole down and run in an 8⅝-inch water string preparatory to making a regulation test, although use of 7-inch casing is being considered as this would eliminate reaming operations. This preliminary work may require another 10 days, as the well has approximately 400 feet of extremely hard formation. Fay Wright worked ou the geology of the area.

It is not believed that any additional drilling will be undertaken within the next fortnight as operators holding leases undoubtedly will await the outcome of the Republic's impending production test. Completion of this wildcat is expected greatly to stimulate aggressive exploration and lead to numerous tests in the general area. Possibility of some geological connection between the Republic Petroleum's wildcat and the productive area in the Lawndale Field less than 2 miles away is seen, and it is probable that acreage between this wildcat and the Lawndale Field will be tested out. Operators holding acreage in the Lawndale Field may also drill one or two wells down to the schist or deepen some producer on the chance deeper production may be developed.

The discovery and subsequent development of the Playa Del Rey Field of Los Angeles Basin appears to have opened up new channels for exploration and this may necessitate revision of some generally accepted geological dogmas. The log of the Republic Petroleum's wildcat indicates that the conglomerate lies immediately on top of the schist, as is also the case at Playa Del Rey. This is particularly interesting because of the probability that deeper drilling in the Lawndale Field will indicate the existence of a similar condition. Lawndale was a distinct disappointment as far as production is concerned, but since no well in that area was carried down into the schist, its real importance may not have been fully determined. It is almost certain that at least one well in the Lawndale Field will be carried down to the schist within the next six months. Leases surrounding the Republic Petroleum Co.'s El Segundo wildcat are all held in large blocks and consequently development work will be along conservative lines.



California's Production Ahead of Its August Allowable

LOS ANGELES, Calif., Aug. 19.—Crude oil production is running substantially in excess of the August allowable of 530,000 bbls. a day and undoubtedly will exceed this quota by a wide margin. Although progress has been slow in getting the approval and signatures of operators on the agreement to conform with curtailment, the outlook is favorable. Approximately 68 per cent of the total state production has been signed up and every effort is being made to get the remaining 27 per cent, the agreement requiring 95 per cent approval. Up to the present, 11 fields have been signed up, representing 210 individual operators. San Joaquin Valley fields are signed up 63.8 per cent; coastal district, 73.3 per cent; and Los Angeles Basin, 69.5 per cent. Operators only have 45 days in which to approve the production agreement.

Overproduction of crude, while not critical at the present time, might become a disturbing factor later in the year when the demand is substantially lower. Conditions in California are rather complicated owing to the disparity between the prices of crude oil and gasoline. Major companies are reluctant to reduce the posted price of crude oil because they feel that those operators who have conformed with curtailment are entitled to consideration, but from an economic standpoint the price of crude oil and that of gasoline are far out of line, forcing some small refiners to suspend operations and others to restrict operations. Plants shut down because of inability to operate at a profit include those of the American Oil Refining Co., Eagle Oil & Refining Co., Envoy Petroleum Co., Exeter Oil Co., Charles W. Fourl, Socal Oil & Refining Co., Sterling Oil Co. and the White Star Oil & Refining Co.

Standard of California

Standard Oil Co. of California has declared a dividend of 25 cents a share payable September 16.

New Bureau of Mines Station at University of Wyoming

The petroleum field office of the Bureau of Mines, Department of the Interior, at Laramie, Wyo., is being reopened as a result of a provision in the department's appropriation for the fiscal year ending June 30, 1936, for establishing and operating a petroleum experiment station on the campus of the University of Wyoming, it is announced by John W. Finch, director of the Bureau of Mines. Offices and laboratories for the staff, composed of petroleum engineers and chemists employed by the Bureau of Mines, are now in temporary quarters but will be moved to a new building to be erected by the university.

Pending the erection and equipping of the building, the staff will make a general survey of Rocky Mountain oil fields and refineries to obtain data concerning problems involved in the development and operation of the fields and in the refining and utilization of the oil produced in the Rocky Mountain area. Following this general survey, specific problems in petroleum engineering and in refining will be studied. A principal objective will be to obtain data helpful in the refining and use of the Rocky Mountain black oils, which are an important factor in the petroleum industry in that area.

The studies at Laramie will be correlated with the unified program of research in the Petroleum and Natural Gas Division of the Bureau of Mines carried on at the Petroleum Experiment Station at Bartlesville, Okla., and petroleum field offices at Dallas and Amarillo, Tex., and San Francisco, Calif. In the bureau's studies relating to oil production emphasis is being laid on the energy associated with petroleum fluids in their natural reservoirs, or producing formations, and utilization of that energy in obtaining maximum recovery.

For the present the bureau's petroleum refining studies will be made at Bartlesville, Okla., and Laramie, Wyo., and the work of the two stations will be planned with the objective of obtaining fundamental data that are lacking and for which a need exists.

The bureau's technical work on petroleum, including the studies at Laramie, is under the general supervision of R. A. Cattell, chief engineer, Petroleum and Natural Gas Division, Bureau of Mines, headquartered in Washington, D. C. Harold P. Rue, Harold M. Thorne and Ralph H. Espach have been transferred from the Bartlesville, Okla., petroleum experiment station to the Laramie office. Mr. Rue will be supervising engineer, Mr. Thorne will be engaged in problems involving chemistry and refining of petroleum, and Mr. Espach will work on petroleum production problems.

Pittsburgh Atlantic Refinery Replaced by Pipe Line

NEW YORK, Aug. 19.—The Pittsburgh, Pa., refinery of the Atlantic Refining Co., one of the oldest refining plants of the petroleum industry, will be shut down permanently with the completion of the gasoline pipe line extension from Harrisburg to Pittsburgh, according to an official announcement. The pipe line extension, which will be completed before the end of the year, will supply the gasoline required for the company's distribution in the Pittsburgh territory. It is said that due to the location of the Pittsburgh plant, its production costs are relatively high.

The gasoline line will also result in a reduction in the operations of the Atlantic's Franklin, Pa., refinery. The Pittsburgh plant has a crude oil capacity of 8,000 bbls. daily with 4,000 bbls. cracking facilities. The Franklin plant has a crude oil capacity of 9,000 bbls. daily and cracking capacity of 4,000 bbls. Both plants have facilities to manufacture lubricating oils.

Canadian Price Trend

TORONTO, Ontario, Aug. 17.—A recent statement of Imperial Oil, Ltd., showed that while in 1934 the cost of living in Canada was approximately 21 per cent higher than in 1913, the price of gasoline was 28 per cent lower. The price of gasoline never rose to as high a peak as the cost of living, and since 1930 has declined almost continuously, and the company is passing on the benefit of economies in operation to the consumer. At the same time, as a result of laboratory research, the quality of the product has steadily improved.

New Fitts Pool Map

E. C. Jacobson, engineer, 510 McBirney Building, Tulsa, has just published a complete map of the Fitts Pool. The map shows all field operations, total depth of each producing well and formation it is producing from; contains a well log section of E. H. Moore and others' No. 3 Atkins in NW ¼ Section 32-2-7, and surface outcroppings of geological formations along fault line south of the main pool, in colors.

OBITUARY

ABRAHAM TELSEY died at Petrolia, Ontario, recently, aged 48. A native of Russia, he came to Petrolia 15 years ago as manager of the Englehart oil property when it was taken over by Telsey Brothers.

J. B. WILLIAMS, manager of the Sarnia office of the Union Gas Co. of Canada, died recently following a protracted illness. A native of Sarnia, son of the late William Williams, former manager of the Sarnia Gas Co., he entered the company's service as a boy and rose to manager. He was a member of the executive committee of the Natural Gas and Petroleum Association of Canada in which position he had a record of valuable service.

COL. THOMAS ENGLISH, R.E., who died recently, was one of the first British engineers to be interested in oil field operations. In 1896 he became associated with the first of a series of Russian oil companies which had acquired proved properties in the Baku oil fields. As managing director of the European Petroleum Co., he paid repeated visits to Baku as well as Rumania, Turkey and Galicia, where the company was also interested.

Wiser Oklahoma and Kansas Properties Sold to Forest

Forest Oil Corp. of Bradford, Pa., announces the purchase of all of the Oklahoma and Kansas holdings of the Wiser Oil Corp. of Sisterville, W. Va. This transaction involves the sale of about 1,750 wells of the stripper type and about 4,000 acres of leases, and about 1,100 wells in Nowata and Rogers Counties, Oklahoma. The other properties are in Washington, Osage and Creek Counties, Oklahoma, and Chautauqua and Montgomery Counties in Kansas.

The wells in Nowata and Rogers Counties are from 450 to 1,200 feet deep, most wells running about 450-foot depth and produce from the Bartlesville sand. Many of the leases have been repressured with gas for some time and the properties are in good condition for the application of water flooding which it is understood will be started later.

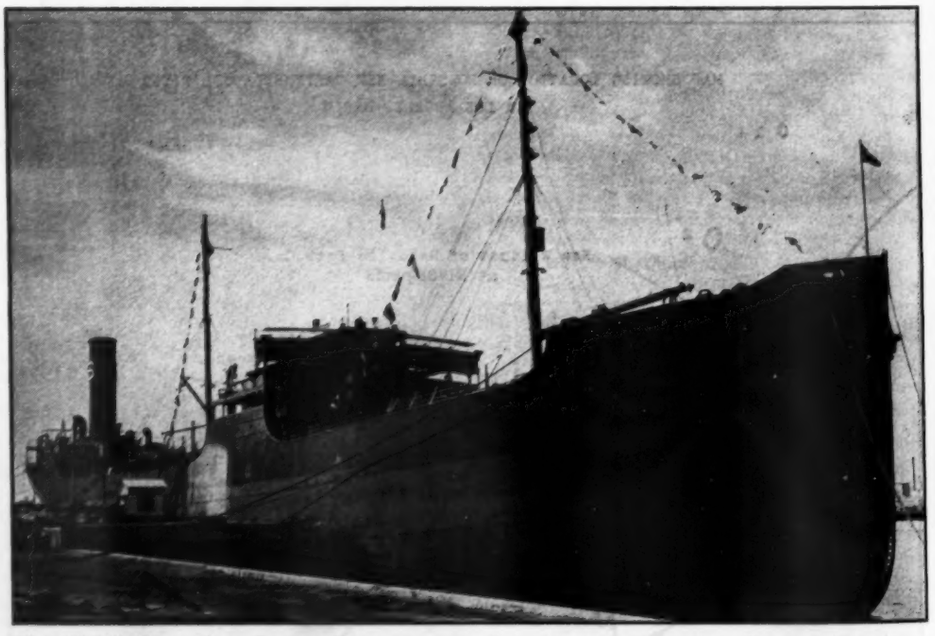
The Kansas wells average from 700 to 800-foot depths and produce from the Peru sand. They are old pumpers having an average daily output of less than 5 bbls. per day.

These properties will be operated by the Forest Producing Corp., Nowata, a subsidiary of the Forest Oil Co., and will be added to the 5,000 acres of leases acquired a short time ago from Warner-Caldwell of Nowata, Okla. Eventually all of these properties will be under the water-flood method of production and it is hoped that the daily production will be materially increased.

Plant Completed

CALGARY, Alberta, Aug. 19.—The new gasoline absorption plant of Royalite Oil Co. on the Sterling Pacific lease in South Turner Valley Field has been completed and is now being tested. In addition to production of the Royalite wells, it will probably take gas from other companies in the vicinity. It has a capacity of approximately 60,000,000 feet a day.

Eugene E. Jurs, assistant to the manager of the eastern offices of Shand & Jurs Co., Berkeley, Calif., and Miss Florence Le Cron, daughter of J. D. Le Cron, assistant to the Secretary of Agriculture, will be married August 30 in Des Moines, Iowa, the home of the bride. Mr. Jurs is a son of Albert Jurs, president of Shand & Jurs Co. Following a honeymoon in New England, Mr. and Mrs. Jurs will reside in New York.



The $2,000,000 tanker, Socony-Vacuum, recently put into service by General Petroleum Corp., made her maiden voyage to Los Angeles, where she took on a cargo of gasoline for Seattle. She was to return to Los Angeles to take 4,292,000 gallons of gasoline to the East Coast. The Socony-Vacuum, 500 feet long and sister ship of the Magnolia, is one of a fleet of five new vessels added to the company's marine equipment

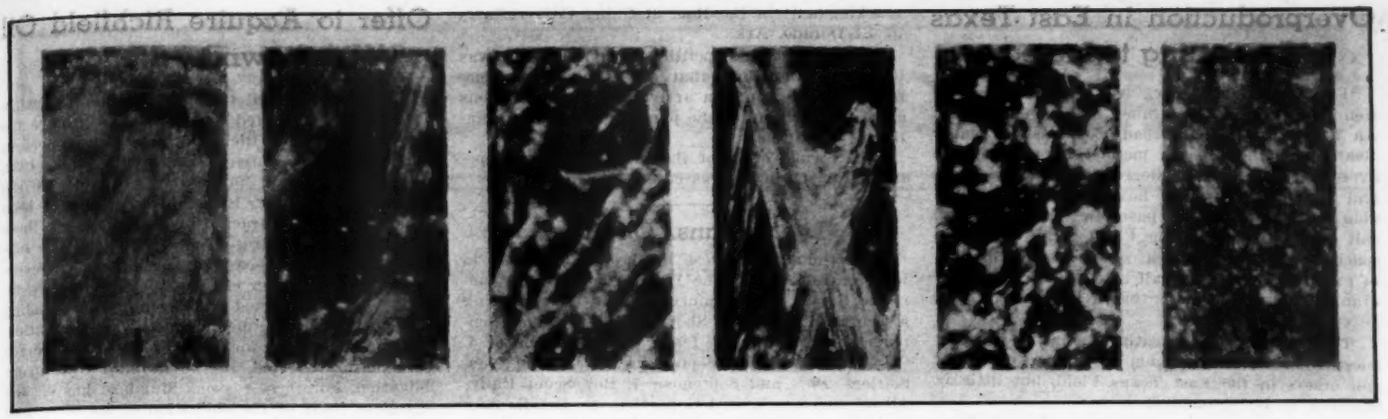


Photo-micrographs showing length of soap fibers in lubricating greases reported by Farrington and Davis in their paper, "The Structure of Lubricating Greases." Nos. 1 and 2, gear greases; No. 3, ball and roller grease; No. 4, petrolatum; No. 5, brick grease; No. 6, cup grease

Construction of Grease Particle Topic Before American Chemical Society

THE PETROLEUM DIVISION of the American Chemical Society concluded its annual meeting held in San Francisco this week, the sessions being well attended by petroleum technologists and chemists. Research work done on refining of lubricating oils and studies involving the methods of determining their physical characteristics were the subjects of many of the papers contributed. Sharing interest with these papers were those involving fundamental research in the field of the hydrocarbons contained in crude oil. One article of timely interest was "The Imminent Danger of Petroleum Shortage in the United States and Its Alleviation," by L. C. Snider, geologist for Henry L. Doherty & Co. and B. T. Brooks. The authors stated that it required 46 years of the American petroleum industry, from 1860 to 1906 to produce the first 1,000,000 bbls. of petroleum from American fields, we now consume this amount in from 13 to 14 months. There never has been any question but that at some time our petroleum supply would approach exhaustion; but long before the extreme condition of exhaustion is reached, we will experience a shortage of petroleum, the essence of the question is when the shortage will be reached.

Another paper attracting unusual interest was "Mechanism of Gum Formation in Cracked Gasoline: Composition of Gum" by J. C. Morrell, C. G. Dryer, C. D. Lowry, and Gustav Egloff of Universal Oil Products Co. Further evidence was brought out at this time that peroxides were the substances primarily responsible for gum formation since they were present in the gum in much greater degree than were the aldehydes and acids. According to the authors the gum contains practically the same concentrations of acids, aldehydes, and peroxides regardless of the extent of oxidation.

"Propane Processes for Refining Lubricating Oil: Asphalt," written by Ulric B. Bray, Union Oil Co. of California, and W. H. Bahlke, Standard Oil Co. (Indiana) was received by the attending chemist with great interest. They stated that the use of liquid propane in lubricating oil refining offers increased efficiency in each refining step. The authors gave a complete refining process for the production of high grade lubricants. They stated that utilizing the advantages of propane consists in treating a reduced crude with propane to effect asphalt removal, increasing the temperature to reject the heavy fraction of oil if desired, chilling by auto-refrigeration to remove wax, and treating to specifications by the use of clay, acid or selective solvents, all while the oil is dissolved in liquid propane at atmospheric temperature.

The results of a photomicroscopic study of the structure of lubricating greases was presented by B. B. Farrington and W. N. Davis of the Standard Oil Co. of California. Under the title of "The Structure of Lubricating Greases," Mr. Farrington and Mr. Davis told how the texture of lubricating greases had been correlated with the length of soap fiber by means of photo-micrographs taken with dark field illumination, and how the soap fibers vary in length from one millimeter to a fraction of a micron with indications that some of the fibers are of ultra-microscopic dimensions.

E. N. Klemgard, motor laboratory manager of the Shell Oil Co., presented "Laboratory Service Testing of Automotive Lubricating Greases," showing how the grease industry is striving to more adequately meet the demands of modern cars, high speed driving and the consequent more severe lubrication conditions. Included in Mr. Klemgard's discussion was the detailed test procedure for investigating the serviceability of five different classes of chassis lubricants, together with the usual physical and chemical analyses. Also discussed by the author were devices for making service tests on wheel bearings greases, and a description of a device for studying waterpump grease service characteristcs and physical composition.

"Syntheses From Natural Gas Hydrocarbons: Nitration of Gaseous Paraffins," was the title of an interesting paper presented by H. B. Hass, E. B. Hodge, and B. M. Vanderbilt of the department of chemistry, Purdue University. In this discussion the results obtained during several years' study of the vapor-phase nitration were reviewed. The technique of nitration of gaseous hydrocarbons; the effect of temperature, free oxygen, superatmospheric pressure, and the effect of catalysts on the nitroparaffin products as well as the properties of the nitroparaffins were also discussed.

A subject of similar nature, "Syntheses From Natural Gas Hydrocarbons: Factors Affecting the Yields of Isomeric Monochlorides and Dichlorides in the Chlorination of Paraffins," was discussed at the meeting. In this discussion was given a method for calculating from the structural formula of any paraffin hydrocarbon the percentages of its various isomeric monochlorides obtainable by noncatalyic chlorination at the temperatures from −65 to 600° C. The authors H. B. Hass, E. T. McBee, and Paul Weber made some interesting generalizations for which evidence was given. According to the authors the presence or absence of the following factors does not appreciably affect the relative rates of primary, secondary, and tertiary substitution: (a) moisture, (b) carbon, (c) light.

"The Pressure Pyrolysis of Gaseous Paraffin Hydrocarbons," an article explaining how the drastic method of pyrolysis is utilized to force the inert hydrocarbons into reaction was paid special attention when presented. Hans Tropsch, C. L. Thomas, and Gustav Egloff were the authors. They stated that increasing the pressure increased the yield of liquid products boiling in the gasoline range without materially decreasing the yield of olefins; the liquid products having an octane number of 77 when run straight, or 93 in a 25 per cent blend with a fuel of 50 octane number.

V. Zahn of the Shell Development Co. introduced "Modification of the A.S.T.M. Lamp Method for the Determination of Sulphur." In the discussion Mr. Zahn explained the improvements that had been developed for the purpose of determining portions of sulphur in organic liquids ranging from .0002 to .002 per cent. His method was to burn the organic liquids with purified air thus gaining more accurate results, also the A.S.T.M. apparatus was somewhat changed in order to obtain better combustion and evenly burning flames. The latter was necessary due to the fact that unevenly burning flames may cause the formation of aldehydes which oxidized to acids thus causing considerable error in the titration, he stated.

"Potentiometric Determination of Mercaptans" by M. W. Tamele and L. B. Ryland of the Shell Development Co. was also given at this meeting. In their research the authors found that it was advantageous to eliminate the hydrocarbon phase completely by using alcohol to dissolve the sample and to titrate with an alcoholic solution of silver nitrate, thereby overcoming the formation of emulsions and the resulting adsorption. They stated that the endpoint was determined potentiometrically, with a silver electrode indicator, thus the method is applicable to colored solutions, as the selection of the endpoint is not dependent on a color change of the indicator.

The unsaturated hydrocarbons of petroleum oils are apparently not toxic to foliage until oxidized to asphaltogenic acids through the combined action of light and air, was one of the statements made by R. P. Tucker of the California State Department of Agriculture in the discussion of "Chemical Properties of Petroleum Unsaturates Causing Injury to Foliage." Mr. Tucker further stated that when petroleum oils were subjected to a rather low light intensities with a large excess of moisture present, a rough gradation was noted in the amounts of the asphaltogenic acids formed in a given time, the amount depending upon the amounts of unsaturates present in the original oils.

Overproduction in East Texas Is Continuing to Increase

FORT WORTH, Tex., Aug. 19.—Overproduction in East Texas continues to gain each week. An attack on the Railroad Commission Tender Board and the present method of proration is expected, some of the alleged "hot" oil operators and refiners apparently having gained considerable courage during the past few weeks. As a result of the Texas Supreme Court ruling upholding spacing rule No. 37 which condemned the drilling of exception wells on small tracts, some of the operators are recommending that wells on such tracts be cut proportionately.

The legislative investigating committee is again questioning Railroad Commission men, operators and others in the East Texas Field, but little is expected to be accomplished.

Overproduction this week was estimated from 45,000 to 47,000 bbls. per day. Runs to refineries in the field, with only 29 operating, had increased to over 72,000 bbls. per day this week. Runs to local plants have been steadily gaining during the past week with the plants connecting to no more oil, or the daily allowable of the wells to which they are connected having been granted no increase in production.

Judge Ben C. Dawkins of the Federal District Court at Shreveport, La., has taken under advisement an injunction action brought by J. T. Oglesby and others against enforcement of the Connally Act. Attorneys for the complainants contend the act is unconstitutional because it delegated to the President and the oil producing states the right to restrict the volume of oil in interstate commerce, a power, it was argued, that lies only with Congress. Contention was also made that the act violated the due process of law provisions of the constitution.

WEEKLY TANK CAR SHIPMENT REPORT

Week ending 12:01 a.m. August 11, 1935

	Cars	Gallons
Gasoline	615	4,987,938
Fuel oil	242	2,281,011
Residuum	10	81,015
Distillate	69	558,797
Casinghead gasoline	215	1,845,237
Gas oil	42	340,627
Kerosene	45	369,066
Naphtha	28	223,499
Butane	5	52,726
Total	1,271	10,739,916

Shipped under state and federal tenders:	No. cars
Interstate	572
Intrastate	121
Coastwise	351
Total	1,044
Shipped under state tenders only: Intrastate movement	207
Shipped under injunction: Intrastate movement	9
Shipped without tender: Intrastate movement	11
Total	1,271

New York Sales Tax Case

NEW YORK, Aug. 19.—Eleven major oil companies distributing in New York City represented by common counsel this week presented their position in the recently filed suit in which they sought to have the city restrained from collecting a 2 per cent sales tax on gasoline in which federal tax of 1 cent and state tax of 4 cents is included in arriving at the amount of tax due. Supreme Court Justice Kenneth O'Brien heard the case and reserved decision. The latter indicated that the merits of the plaintiff's case rested on the question as to whether the sales tax involved double taxation. The city sales tax is based on receipts of retailers.

Deny Rehearing Suit

CHICAGO, Aug. 19.—The federal Circuit Court of Appeals has denied a petition of the Root Refining Co. for rehearing the cracking patent infringement suit brought against it by Universal Oil Products Co. The three-judge court of appeals, sitting in Philadelphia, on June 27, unanimously upheld the earlier finding of federal Judge John P. Nields that two patents owned by Universal and covering "clean circulation" and "multiple coil cracking" are valid and were infringed by the operation of a cracking unit in the Root Refining Co.'s refinery at El Dorado, Ark.

The defendant's petition for rehearing was based on allegations that errors had been committed by the court in arriving at its conclusions as to the meaning of the phrase "without substantial vaporization."

The formal order of the court denying the petition for rehearing was entered August 5.

Lyons, Kans., Oil Show

To stimulate interest in the oil activities in west-central Kansas the Lyons Chamber of Commerce, Lyons, Rice County, Kansas, is sponsoring a Central Kansas Oil Show for the week of September 2 to 7 with the feature days, September 5, Oil Men's Reunion; September 6, Old and New Settlers' Day, and September 7, Boy Scout Rally. All oil men are invited to participate. Details may be secured by writing Horace Jones, Lyons Chamber of Commerce, Lyons, Kans.

Offer to Acquire Richfield Oil Withdrawn by Standard

The Standard Oil Co. of California has withdrawn and terminated its proposal to acquire the properties of the Richfield and Pan American companies. Over three years ago in July, 1932, Standard's original proposal was made to the creditors' committee. Since then there have been changes in the character of the assets of those companies; to illustrate, in one instance, the sale by Richfield of its eastern subsidiary. These developments and other changes in the situation, together with continued uncertainties surrounding the completion of the proposed reorganization, make it impossible for Standard to continue for an indefinite period its outstanding contingent obligation. For these reasons Standard has elected to relieve itself of the obligation of its offer, and with freedom determine its future course in the light of developments as they may occur.

CONSTRUCTION NEWS

Shoreline Improvements

SHREVEPORT, La., Aug. 19.—Enlargement of the Shoreline Refining Co.'s plant at Lewis, between Oil City and Vivian, and replacements of equipment at a total cost of $50,000 will be begun during the week of September 1.

The company is replacing the bubble tower and adding a condenser. A new unit at the refinery will be the canning unit, which will cost about $15,000. This canning unit will have a capacity of 25,000 one-quart cans and 15,000 five-quart containers daily. It is being installed because of the trend toward purchase of oil in cans instead of in bulk.

The refinery has a capacity of 1,200 bbls. daily. It has enough oil already treated to take care of its needs during the workover period.

Abandoned East Texas Lines

AUSTIN, Tex., Aug. 17.—The Railroad Commission is concerned with the destruction of oil pipe lines, particularly in East Texas, which have passed out of legitimate use and those which have been changed locations. It heard testimony as to what action should be taken with them. While a pipe line permit can be revoked the commission cannot order it removed. Sometimes it is illegitimately used.

Gordon Griffin, chief petroleum engineer for the commission, suggested that companies be required to file maps within 15 days after locations are changed showing new routing. Abandoned lines should be dug up, F. W. Renshaw of the State Railroad Commission's oil law information staff said. No one claims the lines, Mr. Renshaw said. He thought someone would claim them if the commission started to dig them up. Then the commission could require them to be recorded.

Mr. Renshaw intimated there are about 15 lines in East Texas of which there is no written record. A requirement that all be shown, he said, would be a great aid in enforcing oil regulations.

New Michigan Plants

MUSKEGON, Mich., Aug. 19.—Construction of two new 1,000-bbl. skimming plants is being started at Alma and Drayton Plains, Mich., by the Wolverine Petroleum Products Co. and Inland Refineries, Inc. W. H. Behrens is president of the Wolverine company erecting a plant designed by Frank H. Langyear, Detroit engineer. E. G. Guy, designer of several independent Michigan refineries, will supervise construction and operation of the new Inland Refineries plant in Oakland County, north of Detroit.

A $200,000 extension of the Consumers Power Co.'s central Michigan gas line will be completed about September 1. Main line work has been completed and laying of laterals has been started to Hinton and Millbrook Township gas wells in Mecosta County. The line will serve Midland, Saginaw and Bay City, connecting with a former line from the Broomfield Township, Isabella County field to these cities at Broomfield.

New Port Arthur Unit

The Texas Co. has started work on the installation of a solvent refining unit and solvent dewaxing unit at its Port Arthur, Tex., refinery. The solvent refining unit will follow the design of other units using the furfural process which is controlled by the Texas Co. and will have a capacity of 2,500 bbls. daily. The dewaxing unit incorporates the benzole-acetone process similar in design to the original unit installed at the Lawrenceville, Ill., refinery of the Indian Refining Co., a subsidiary of the Texas Co. This unit will have a capacity of 2,000 bbls. daily. It is expected that both units will be completed and in operation before the end of the year.

London Pipe Line

CHATHAM, Ontario, Aug. 17.—The Union Natural Gas Co. of Canada, Ltd., has commenced laying a 10-inch pipe for its 55-mile line to deliver natural gas from the Dawn Field in Lambton County to the City Gas Co. of London, Ontario. The line is to be completed by September 12, and natural gas will be furnished to all London consumers this fall. The City Gas Co. is laying 14 miles of new mains in London, including a system of belt lines to ensure equal pressure throughout the system.

New California Gas Line

Construction of a second gas pipe line into San Francisco from Meter Station, 46 miles south of the main pipe line, will be started immediately by the Pacific Gas & Electric Co., it was announced by the company. Contracts for 8,600 tons of 22-inch welded steel pipe to cost approximately $800,000 has been awarded Western Pipe & Steel Co. Delivery of the pipe is to begin within 30 days and it is expected that the entire line will be completed by December 1.

Natural Gas Extensions

ST. THOMAS, Ontario, Aug. 17.—The Dominion Natural Gas Co., which holds a franchise for Yarmouth Township, is extending its mains from Talbotville to Lynhurst and other suburban areas, a distance of 3 miles. Extensions will also be made to Yarmouth Heights and Yarmouth Center, and possibly to Sparta and Port Stanley.

NEWS FROM FOREIGN LANDS

Mexico

Expansion in the operations of Compania Petroles de Mexico S.A. (Petromex) starting the last half of this year is predicted in Mexican oil circles. This company was organized last year under the sponsorship of the government, which is part owner of the capital stock. It was announced at that time that the company would engage in all branches of the oil business in Mexico and subscriptions to the stock of the company were secured in Mexico. Under the plan adopted, the Mexican government contributed certain lands which are considered favorable for the production of crude oil with a small production from a few wells. The company was to be favored in granting future concessions. In return the government was to own 50 per cent of the capital stock.

The company has a small local refinery. It was connections and also engage in the marketing end planned to enlarge the refinery, build pipe line of the business in Mexico. Mexican consumers were promised lower prices on gasoline.

It was planned to raise approximately 5,000,000 pesos to finance the initial operations. Some money was raised last year but more is needed.

The company management has been reorganized and Pascual Ortiz Rubio, formerly president of Mexico, has been appointed head of the company by President Cardenas. It is now said that plans have been completed for an expansion program which will be actively supported by the government which has been at odds with privately operated companies on several matters over the past few months. Mr. Rubio succeeds Lazaro Cardenas who resigned as minister of national economy.

Italy-Ethiopia

Italy's preparations for possible war with Ethiopia is given part credit for the improvement in European prices for petroleum products reported by several countries for the first six months of this year. Accurate figures on the quantity of petroleum products purchased by the Italian Government for use by her army, navy and aviation corp, in addition to her domestic requirements, are not obtainable, but available information on her imports and the exports of other countries indicate a substantial increase. The increase was estimated as high as 30 per cent earlier in the year.

Italy's normal consumption of petroleum production is around 2,500,000 tons yearly or less than 50,000 bbls. daily. A large part of this total is represented by fuel oil for her navy and her merchant marine. The normal imports it is said have been augmented by additional supplies starting last year, part of which has gone to storage facilities for emergency use. The Government also has been a large buyer of aviation grade gasoline.

Rumania is the principal supplier of petroleum products for Italy. The first six months of 1935 imports of crude oil and refinery products into Italy from Rumania totaled 710,000 tons or approximately 27,500 bbls. daily. The first six months of 1934 the imports totaled 440,000 tons or 17,000 bbls. daily. Italian capital is directly interested in some of the Rumanian private oil projects.

This additional outlet for Rumanian petroleum products has helped that country in advancing prices from the low levels of last year and that in turn has been an aid to all oil producing and refining countries supplying the European markets. Rumania is the principal factor in the European market selling large quantities of material both on contract and on the spot market. In the gasoline end its open market sales to a large extent, determine the market trend on export sales in the United States. Last year its prices were consistently below the Gulf Coast export market in United States. In recent months its prices have been above the Gulf market. It was said commitments of Rumanian refiners to Italian buyers were so large that they practically withdrew from the general European market for a time. This was reflected in a large increase in gasoline exports from the United States in June and also aided the Dutch West Indies refiners.

So far, Italy's program to develop a domestic refining industry and also increase its own production of crude petroleum has not met with success so far as actual output of refinery products is concerned. Italy's crude oil production which is approximately 700 bbls. daily was slightly less the first half of 1935 compared to 1934. Her refinery output was also less the first half of this year. This situation has meant that all of the increased demand had to be supplied by purchases in other countries. However, at least two refinery expansion programs are under way at this time and two others probably will start the last half year. The refinery output is expected to show a large gain the latter part of this year.

Colombia

The No. 3 test of the Colombian Petroleum Co. controlled by the Gulf interests located in the southern half of the Barco concession in Colombia has an oil showing at approximately 1,300 feet with a strong gas pressure. This is the first test to be drilled on the south dome of the La Petrolea structure and there has been considerable interest in the progress of the test. Due to the high gas pressure drillers have been delayed in resuming operations to determine the oil flow.

The test is about 3 miles south of the closest tests of the north dome. Several tests have been completed on the north dome with three rated as oil wells. The company railway was extended to the No. 3 site last spring and the test started which it is expected will indicate the possibilities of the south dome.

In the northern part of the Barco concession the No. 2 Oro, the first test to be drilled in that section since 1919, is drilling at around 2,000 feet. Oil showings have been obtained with little or no gas. It had been expected that commercial production would be obtained at shallow depths. The test probably will be drilled to 4,000 feet.

—Photo by L. C. Uren.

Sheathed rig, gas traps and field storage tanks in Bibi Eibat Field, Baku district, U. S. S. R.

Production

Production of the Shell units in Venezuela according to latest available reports was as follows: (data in barrels)

	—Four weeks ending—	
Caribbean Petroleum Co., Ltd.	Aug. 3	July 6
Mene Grande	1,141,600	1,501,200
Venezuelan Oil Concessions, Ltd.,		
La Rosa	769,800	656,200
Lagunillas	2,058,700	1,977,400
Concepcion	111,100	109,300
La Paz	12,000	12,200
Total	2,951,600	2,755,100
Colon Oil Corp. (August 2)	381,800	*393,600

*Four weeks ending July 5.

Production of the International Petroleum Co., Ltd., in Peru, and the Tropical Oil Co. in Colombia for July and previous month was as follows: (data in barrels)

	1935	1934
Columbia—		
July	1,639,054	1,646,739
July (daily)	52,872	53,120
First 7 months	10,263,873	9,097,639
First 7 months (daily)	48,414	42,913
Peru—		
July	1,276,305	1,233,805
July (daily)	41,171	39,800
First 7 months	8,531,542	7,850,182
First 7 months (daily)	40,243	37,030

Germany

Following its national policy of substituting domestic products wherever possible for imported materials, Germany is now experimenting with coke-oven gas as a motor fuel, according to a report from Consul Sydney B. Redecker, Frankfort-on-Main, made public by the Commerce Department's Chemical Division.

With the view to demonstrating the practicality of utilizing coke-oven gas as a motor fuel, the Ruhrgas, A.G., joint distributing subsidiary of Ruhr coke plants, recently sent a large omnibus from Essen to Koinsberg, in the extreme northeastern part of Germany, powered exclusively with gas from Ruhr coke ovens, according to the report. The trial was pronounced successful.

Gas for the trip was carried in steel cylinders on a separate trailer which were recharged en route at Hanover. The Hanover station which receives its gas supply by pipe line from Ruhr coke plants is said to be the only illuminating-gas motor tank station in the world.

A further development in the use of chemically-produced gas as a substitute for gasoline, was the establishment a few months ago in the Ruhr district of the world's first gas-tank station for supplying motor-methane, which is produced by the Hibernia nitrogen plant at Herne, and by two other Ruhr companies.

The methane is recovered in these plants from coke-oven gas and stored in tanks under normal pressure. The gas is later compressed in high pressure storage tanks which serve as filling stations for motor vehicles, making it unnecessary for the vehicles themselves to carry compressors, the report states.

It is reported that, after some months' operation, this methane gas tank station has given excellent service and that already 200 trucks in the Ruhr Basin are using this new motor fuel, and that the number is increasing steadily.

It is estimated the consumption of light motor fuels in Germany amounted to 755,000 tons in the first half of 1935, an increase of 9.4 per cent over the 690,000 tons consumed in the corresponding period of 1934.

the OIL AND GAS JOURNAL

PRODUCING REFINING NATURAL GASOLINE PIPE LINE

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P. C. LAUINGER
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A. M. ROWLEY
Editor

W. T. ANDERSON
Managing Editor

JAMES McINTYRE
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Future Shortage and Present Overproduction

Oil men will smile, perhaps wistfully, at the prediction of an American shortage of crude within a very few years, necessitating increased imports to supply the domestic market and forcing motorists to resort to small low-powered cars.

Yet, aside from dissent over the immediacy of the prospect, there is enough reason for the industry to take a long range view of its possibilities. New pools are being found, none however, an East Texas, but it is still true that this country needs to find a half billion barrels of new production each year over and above the present discoveries to keep pace with consumption which is again increasing. It may be necessary to drill more than those 20,000 wells a year to get the required supply.

That is one side of the picture. The other side is the present situation where there is no immediate shortage, rather a threat of overproduction. How foolhardy it must be to be overproducing today a commodity that may be commanding larger returns in the not remote future.

Present overproduction not only disregards future possibilities but risks the sacrifice of present prices by forcing surplus crude upon the market on the eve of the season of declining demand for petroleum products.

This distinction between the immediate situation and the long range situation should not be obscured by undue emphasis upon the possibilities of a crude shortage, within a few years, often predicted but still to be realized. The frequency of new discoveries, if not their size, encourages the belief that America is still some distance from exhausting its potential reserves of petroleum.

The essential policy is one of strict regulation of current production to demand, including control of new pools to permit necessary exploration for reserves without endangering the market.

No Need to Worry If Oil Bill Fails

If Congress adjourns without passing any oil legislation the oil industry can afford to take it very philosophically. Matters will be just about where they are.

Stress has been laid upon securing congressional and presidential approval of the interstate compact. The purpose of that compact is to have the oil producing states consult upon concerted state action for the conservation of oil and gas. They can do this without formal enactment by Congress.

The conservation program recommended in Article III of the compact is limited to actions by the individual States in which the States have sole authority. They can consult and put into effect these recommendations any time they decide to do so.

If any State should not wish to do so formal approval of the compact by the Federal government would not compel them to act contrary to their own wishes.

If the oil producing States which approved the terms of the compact when it was formulated and those who have since ratified it mean to live up to it they can go ahead whether Congress approves or fails to approve the compact.

In other words, as has been insisted upon in these columns right along, the success or failure of the compact rests with the individual States and the good faith and energy of their administrations in genuine conservation programs.

There is no place for a Federal petroleum administrative board in the picture. Chairman Cole emphasizes that the board in his bill would be merely advisory and in no sense possessed of authority over the industry or the States.

In the preliminary report of his sub-committee which studied the oil situation it was stated very explicitly that "The Bureau of Mines might very easily be revamped for the purpose." The substitution of an independent petroleum administrative board in the Cole bill is therefore an unnecessary expense as indeed is expressly stated by the minority of the House Interstate Committee which flatly opposes the creation of a petroleum administrative board because "it means another board with the usual consequences and additional expense and is, in our opinion, wholly unnecessary. All necessary work that the Cole bill proposes to have the board do is now done by the Bureau of Mines in the Department of the Interior, or can be done by it with little, if any, addition to its personnel."

If the fact that the Bureau of Mines is in the Interior Department headed by Secretary Ickes caused the Cole sub-committee to endeavor to set up an independent and superfluous petroleum board it is not sufficient reason.

The purely statistical and engineering functions which the Bureau of Mines has been performing in relation to the oil industry since long before Mr. Ickes was ever heard of can be continued without giving Mr. Ickes any authority over the industry.

With all due reflection upon Mr. Ickes' peculiarities, if there is a choice between the two evils, there may be even some who would prefer to take chances with his administration than with a purely political independent board.

But there is no need to endure either and if Congress fails to pass any oil legislation the Bureau of Mines will continue to perform its routine functions to the satisfaction of the industry and with a considerable saving to the country.

So, if no oil bill is passed, the industry will not worry.

The units illustrated are part of a shipment to a foreign refinery of 24 Kellogg High Pressure Heat Exchangers, containing over 14,000 sq. ft. of heating surface.

These units were designed for unusual operating conditions and the pressures and temperatures involved were:

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Diesel Powered Direct Current Electric Drilling Units Cut Wildcatting Costs

By L. G. E. BIGNELL

IN THE SEARCH FOR NEW pools of crude oil it has become increasingly necessary to go to areas far removed from present producing fields and it is also necessary to explore to greater depths. These two conditions have brought about a decided change in the type of power equipment used in wildcatting.

In areas where oil has been discovered, fuel and water for steam rigs are usually accessible at reasonable costs. But the further the new locations are away from cheap fuel supply the costlier are the oeprations. Suitable water is frequently very hard to find in sufficient quantity for steam power purposes. It is not an uncommon thing to lay a pipe line from a natural stream several miles away and it is also sometimes necessary to construct one or two small earthen dams to store sufficient water for drilling purposes.

Under such conditions it is necessary to erect a pump at the source of the water and employ three men to operate it each working an eight-hour shift. In addition it is necessary that a relief man be available and when the wages paid to these pumpers is added to the cost of fuel and upkeep of the pump and line it is not unusual to find it costs $500 per month or more to deliver water to the location. This figure does not take into consideration cost of line and equipment.

Likewise it is sometimes very difficult to secure fuel for the boilers at reasonable cost. Using modern rotary outfits it is usual to set three 125-horsepower high pressure boilers at the rig. These boilers are run at 275 pounds per square inch pressure. To maintain this pressure requires from 750,000 to 1,000,000 feet of gas per day for three boilers. Frequently more than 1,000,000 feet will be used, but based upon this as average and gas worth 15 cents per thousand it will cost the operator $50 per day per boiler for fuel. If oil is used it will cost $20 or more per day per boiler depending upon length of haul to the rig.

The quantity of water used at a location depends upon the type of mud needed. If clear water is frequently added to the pits the demand will be relatively high. At one location about 120,000 bbls. of water was needed for the well and based upon a cost of 3 cents per barrel it cost the operator $3,500. This may be an exceptional case but it is estimated by engineers that the elimination of steam equipment on a 4,500-foot hole will save the operator not less than $2,500 per well.

Where a company is drilling a number of wildcat tests this cost of water and fuel totals to a considerable sum and to reduce this cost as much as possible it is now common practice for the drilling contractors to use rigs powered with internal combustion engines.

Within the past few years the Diesel engine has been introduced into this field and this power unit is now gaining favor and this article will deal with the recently developed Diesel powered direct current generator units built by the National Supply Co. Two such units are now used in drilling offset locations in the Lucien Field, Oklahoma. This type of rig is not to be confused with the Diesel powered rig that delivers power through a central countershaft such as described in The Oil and Gas Journal of August 30, 1934, issue.

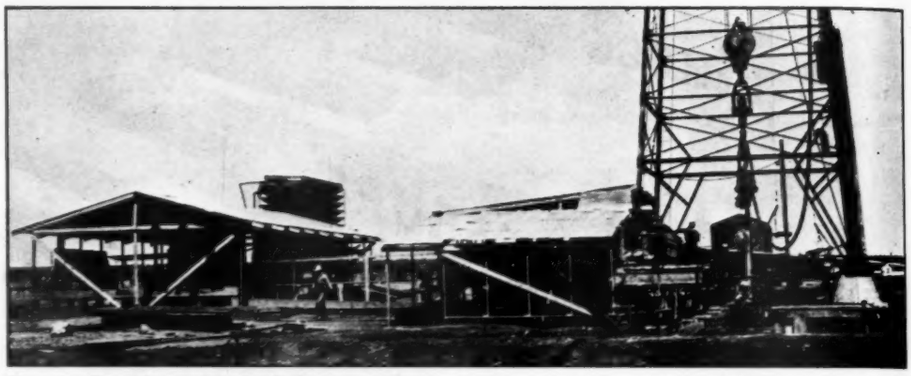

Fig. 1—Diesel engine and direct current generator outfit on rotary drilling rig in South Lucien Field in Noble County, Oklahoma

TABLE 1—TYPICAL OPERATING DATA ON DIESEL POWERED DRILLING OPERATION

	Total barrels consumed	Total gallons consumed	Barrels per day average	Gallons per day average	Gallons per foot of hole
Derrick and pit water	41,433	. .	324	. .	230
Engine cooling water	7,097	...	57.5	...	39
Engine fuel oil	927	...	7.55	...	5.2
Engine lubricating oil	.....	567	...	4 6	. .
Lighting engine gasoline	.....	952	. .	7.7	. .
Lighting engine lubricating oil	.....	9 5	...	...	. .
Mud pumps lubricating oil	.....	291	...	2.3	. .

Fig. 2—Shed built to cover two Diesel engines and two direct connected generators

These new units were installed in July and consist of two 350-horsepower eight-cylinder 9x12 inch Superior engines of the four-cycle full Diesel type operating at from 250 to 600 r.p.m. The two engines face one another and between them are two 175 kw 200 volt 1,200 r.p.m. differentially wound and separately excited direct current Westinghouse generators.

Power is delivered from the engines to the generators through "V" belts and both generators and exciters can be compounded to deliver 400 volt current when necessary.

The two engines can be tied together when full power is needed, as for instance, when a long string of drill pipe is being pulled out of the hole or a long string of casing run. Either engine can be used for driving the drawworks or the pumps or one engine may be used for power. Normally one engine furnishes power to generate current for motor on the drawworks and the other engine supplies power for the slush pump.

To cool the engine cylinders a portable water tank is provided with a louver above the water chamber. This louver is designed so it can be lowered into the tank when the cooling tower is moved from location.

The pumps used are of the 7¼x14-inch stroke power driven type and each pump is powered by one 200-horsepower motor. The rig is the 34-26 Ideal drawworks also powered with a 200 to 400-horsepower motor, or it is optional to use two 200-horsepower motors which may be compounded if necessary for heavy duty.

The auxiliary equipment consists of a gsoline engine connected with a 5 kw direct current generator for lighting and other purposes. A type "B. L." Superior gasoline engine is used to drive a compressor to store air for starting the engines.

These Diesel engines use .45 pound of fuel oil per brake horsepower hour at full load, and .47 pound at three-quarters load, and .55 pound per brake horsepower hour at one-half load.

The experience gained in one well drilled to a total depth of 7,550 feet in 124 days using 5,870 feet of 6⅝-inch drill pipe and 1,680 feet of

4½-inch drill pipe and setting 5,870 feet of 42-pound 9⅝-inch casing was carefully recorded and is given in Table 1.

In 1932 the A.S.M.E. issued a report on Steam Equipment for Rotary-Drilled Oil Wells in Oklahoma City. This outfit had three 125-horsepower boilers with the usual steam equipment. In a tabulation of data covering the average quality of water and gas used in drilling from 4,470 to 6,320 feet with a 4½-inch drill stem it is stated 12.25 bbls. of water was delivered to location, or 515 gallons per foot of hole. The boilers used 12 bbls. or 505 gallons of this water and the balance went to the slush pits. During the same period the boilers used 5,731 feet of gas per foot of hole drilled.

The results of a six days' drilling period with 3½-inch pipe states 313,000 pounds or 894 bbls. of water was delivered to the location each day and of this 525 bbls. of water was consumed by the boilers. The gas metered to one boiler was 247,000 feet per day and at this rate the three boilers used about 911,000 feet daily.

From these figures it is easy to estimate the saving in fuel and water effected by the use of the Diesel powered direct current generator outfits. As the characteristics of the direct current motors are such as to permit almost the same flexibility in the various drilling operations as the steam rig, it seems probable their use will increase in areas where water and fuel are not easily obtained.

With the direct current variable voltage motors rated at 200 horsepower at 450 r.p.m. with a 40-degree temperature rise for continuous operation on 200 volts and at 400 horsepower at 900 r.p.m. with 40-degree rise for constant operation on 400 volts as the load increases or decreases the speed decreases or increases in inverse proportions and at zero speed the maximum torque of the motor shaft is available.

This characteristic permits the operator to secure full torque in the motor driving the drawworks if it is necessary to pull stuck pipe or perform any other heavy duty. This condition is similar to the characteristics of the steam engine and permits of increasing pulling speed as the load is lightened as stands of pipe in the derrick increase in number. In handling the empty traveling block it is also of advantage for it can be lowered quickly or sent up fast depending on whether pipe is being pulled or run into the hole.

On the pumps direct current motors of the same size and rating are used and they act like steam driven units as the load is increased the speed falls off and through an inherent characteristic of the motor the pump hose and rig are protected from overloading.

There is no power factor to be taken into consideration with the direct current motors and in this way the necessity for providing additional size for low power factor and higher fuel consumption is eliminated. With the direct current motor as the load on the drawworks decreases the power factor does not decrease in the same ratio and as it is necessary to operate the drawworks to drive the turntable most of the time when little power is needed this characteristic of the direct current motor results in saving in operating costs.

The overall efficiency of the direct current power rig is high because the speed control losses are low. Most of the speed regulations of the direct current rig are done by varying the small exciter voltage with consequent slight waste of power. These various operating advantages will reduce engine horsepower consumption by about 33⅓ per cent below rigs powered with other type motors.

These electrical characteristics of the direct current generator and motor are important and have been incorporated into the two new units now in use in Lucien Pool.

Diesel engines burn rather than explode the fuel. No spark is required to ignite the fuel because it burns at the high temperature secured within the cylinder by compressing air to 400 to 500 pounds per square inch pressure. At this pressure the temperature is raised to about 900° F.

The fuel oil is then sprayed into the cylinder and there are three main types of fuel injection systems employed. The older type originated by Dr. Rudolph Diesel utilized air under high pressure to inject the oil into the cylinder. The more modern type Diesels use one of two types of solid injection systems which do not employ air to inject the oil into the cylinders.

Two types of solid injection Diesels have been utilized. One type uses an individual oil pump and spring loaded valve for each cylinder. The pumps are cam actuated and the spray nozzles or valves are spring loaded and when the pump pressure exceeds the spring pressure the oil rushes into the cylinder and passing through fine openings in the nozzle is atomized and burns quickly. The expanding gases force the piston downward and thus creating energy.

Fig. 3—Interior of power plant generating current for rotary outfit

The second type of solid injection Diesel engine is known as the "rail injection" type. With this system two pumps are used and deliver the fuel oil into a manifold which is connected to every spray valve. The spray valves are mechanically operated and the fuel oil from the manifold is carried under high hydraulic pressure at all times. When the camshaft actuates the levers controlling the valve, the stem of the valve is forced up and away from the seat, allowing the oil to rush into the cylinder. As soon as the cam on the camshaft has turned over to the position where the push rod will be lowered the spring on top of the valve stem pushes it back to seat and shuts off the supply of oil to the cylinder. The pressure within the fuel system is varied by means of a by-pass valve and ranges between 1,200 pounds for no-load to 5,000 pounds or more for full load.

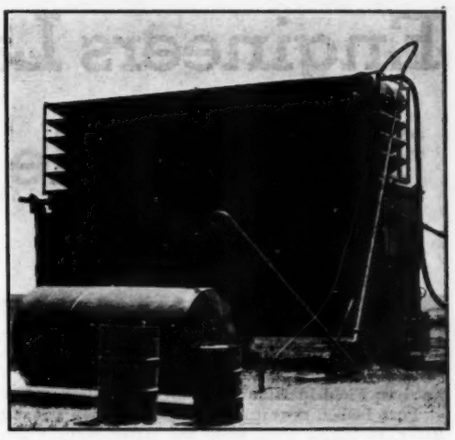

Fig. 4—Water cooling tower with disappearing louver furnishing cooling water for Diesel engine cylinders at rotary rig

These engines weigh about 26,000 pounds each and the two direct current generators with their mounting about 23,000 pounds including the two exciters and pulleys. The pumps and drawworks can be moved by truck also. To erect the engines and generators at location it is usual to prepare a good dirt grade and support the steel skids under each unit upon heavy cross timbers. Fuel oil is stored in a bolted steel tank near the engines and it is usual to contract for the delivery of this fuel to location and this work is carried on during favorable road conditions.

While the controls on the Diesel power rigs are different from those on a steam engine the drillers have experienced no difficulty in mastering the operations and the only additional help employed is one engineer who is really not an extra man for with the steam outfit it is usual to employ a fireman to look after the boilers.

From the experience so far gained with these units there seems to be no material change in drilling speeds, some contractors reporting they are making just as good time as they would with steam powered rigs and others stating they believed they were not making quite as good headway but in the latter case it is possible conditions in the hole would have slowed up the drilling with steam driven equipment, also.

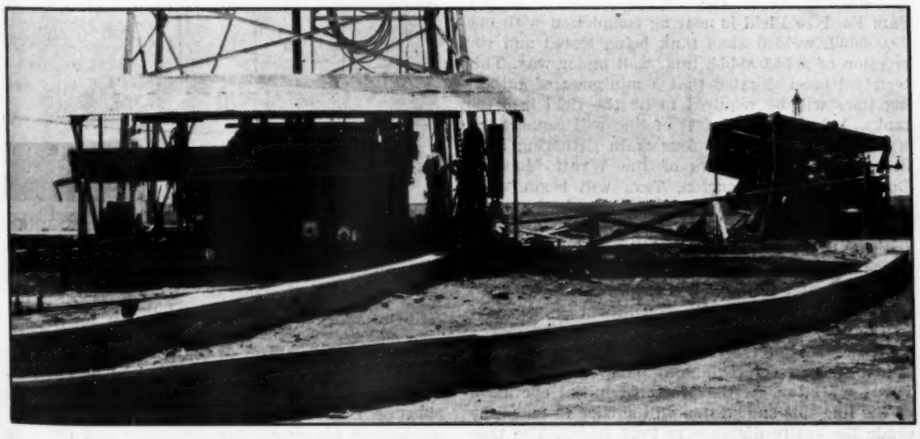

Fig. 5—Derrick and slush pumps as seen fro m floor of power plant showing conductors for electric power lines between generator and motors

Metering Large Volumes of Gas Made More Accurate

A suggestion which may prove of great value in the metering of large volumes of gas has been made by H. S. Bean, chief of gas measurements section, National Bureau of Standards, Department of Commerce.

In a pulsating gas flow there are recurring rapid variations in either or both the pressure and the velocity. The metering of such flows, particularly by orifice meters, is usually subject to error, due to the inability of the indicating or recording mechanism to follow the rapid changes, or to average the variations in the pressure properly, Mr. Bean stated.

Experiments and experience have indicated that the determination and application of correction factors to compensate for such errors cannot be relied upon. The only alternative, Mr. Bean believes, is to eliminate or greatly reduce the pulsations before attempting to meter the flow. The most effective way to do this is to place a combination of capacity and throttling between the sources of the pulsations and the meter. In some instances either of these means may be effective.

Engineers Laying New 88-Mile Line in Rio Grande Not Guided by Precedent

By GEORGE WEBER

CONSTRUCTION IS PROGRESSING rapidly on the new 88-mile crude oil pipe line of the Valley Pipe Line Co. in the Rio Grande Valley of Texas. The line, connecting the Sam Fordyce Field in Hidalgo County with deep water at Port Isabel, near the mouth of the Rio Grande River, is taking form from the latter point while storage facilities are being prepared at terminals.

Since the arrival two weeks ago, of the first of two cargoes of pipe and couplings, three trucks with as many crews have strung pipe 20 miles inland to Los Fresnos and ditching and coupling crews are keeping pace. The S. S. Beatrice, with the first load of pipe, was the second ship to enter the new Port Isabel Harbor.

The line which is the first in this section of Texas is being laid under construction contract with the Fredell Construction Co. of Houston, Tex. Oscar Fredell, president of the company, is personally supervising the work which employs 140 men. The Valley Pipe Line Co. is one of three newly formed units of the valley project. The Port Isabel Terminal Co. will operate the terminal facilities at that point. Coastal Refineries, Inc., has been created to refine and market the crude handled in the line. These three corporate units are owned by the firm of Murchison & Closuit, Inc., of Dallas, Tex. T. F. Murchison is the president and E. M. Closuit the vice president of the holding company. The refining company is headed by G. L. Rowsey, a major stockholder, who is well known as a pioneer refiner in Southwest Texas. The superintendent in charge of the line is H. H. Hensley who maintains headquarters at the present time in McAllen, Tex. Upon completion of the line a field office will probably be established at midway between Sam Fordyce and Port Isabel.

Republic electric weld pipe furnished by the Continental Supply Co. is going into the line. It

Welding a section of pipe on a curve

measures 5½ inches outside diameter and is supplied in 40-foot random lengths. The pipe is transported by rail to Baltimore, Md. and from there it is shipped by water to Port Isabel. Dresser couplings are being used throughout the line. Over 11,000 of these will be required. This is the longest oil pipe line yet laid to employ this type coupling.

Ditching in the loamy valley soil presents no difficulties, and three machines are progressing rapidly on the job. The pipe receives a protective coating of asphalt paint prior to coupling, the joints then being coated and the line inspected

H. H. Hensley, superintendent of the Valley Pipe Line Co., will operate the line

before burying in a 30-inch ditch. This depth of ditch will allow for anticipated periodic inspection of the line. At points of greatest curvature and at canal and highway crossings, electric welding is being employed to join the sections. This policy was considered advisable for uninterrupted operation of the line at these points of greatest stress and inaccessibility. At canal intersections the line is being laid at a depth of 15-17 feet in a protective 8-inch casing. Suitable valves are placed in the line at all intersections to facilitate possible future repairs.

During the process of laying the line, the canal and highway intersections present the greatest difficulty. Irrigation projects form a network of open waterways throughout the valley and the line crosses a great many canals and water sectors along its right of way. However, throughout the length of the line, the company has enjoyed the full co-operation of landowners and irrigation interests. Precautions are taken to prevent radial flow of water from the canal crossings.

Construction of the storage facilities in the Sam Fordyce Field is nearing completion with one 20,000-bbl. welded steel tank being tested and the erection of a 55,000-bbl. tank well under way. This terminal is so situated that a minimum of gathering lines will be required to tie the field into the tanks. A few hundred feet of line will connect the station with all of the four main gathering lines in the field. The crews of the Wyatt Metal & Boiler Works of Houston, Tex., will begin work on the tankage at the deep water terminal as soon as the field farm is completed.

The S. S. Fluor Spar of the Lykes Brothers Lines has cleared Baltimore with 1,000 tons of tank steel and refinery equipment and is expected in Port Isabel shortly. W. E. Dillman is in charge of the terminal and refinery construction.

Plans call for the immediate installation of one Diesel driven Worthington pump at the Sam Fordyce station. At the projected initial operation of the line this one station will suffice to move the crude the entire distance to Port Isabel. The unit is capable of exerting a pressure of 850 pounds providing power to move 5,000 bbls. of oil per day.

However, valves and other facilities are being installed for the future installation of a booster station midway along the line. This station will fall about 2 or 3 miles west of the town of Progreso. With this provision it will be possible to handle any additional crude which may be produced in the Sam Fordyce Field as well as the production of any other future valley fields which might justify such an outlet.

A 27-acre tract has been selected at Port Isabel for the site of the terminal and refinery. Here foundations are being prepared for two 55,000-bbl. tanks, one for crude storage and one for furnace oil. These tanks will be the property of the terminal company. In addition three 25,000-bbl. tanks will be erected to serve the refinery.

In building the line in the lower Rio Grande Valley, the Valley Pipe Line Co. engineers are proceeding without information gained by precedent. The only other pipe line in the section is operated by the Rio Grande Valley Gas Co. This line terminates at Rio Grande City, several miles west of Sam Fordyce. In regard to the moisture content of the soil in this region, the Rio Grande Valley is divided into three moisture levels. The gas line falls entirely in the third or highest level while the new pipe line traverses the first or lowest two levels. In view of this extremely moist soil condition, precautions are being taken for adequate protection of the pipe. In addition to the protective coating of asphalt and the anticipated inspection program, the engineers are investigating the feasibility of providing cathodic protection for the line in sectors adjacent to power lines. Installation of a system of generator units similar to those described in The Oil and Gas Journal, May 16, 1935, is being considered. These measures

View of completed line showing coupling

are expected to successfully preclude any damage due to soil and electrolytic corrosion. Interior corrosion will not be encountered in the crude.

Estimated cost of the line will approach $400,000 and the investment in the entire project of the three units handling the oil is placed at $750,000. The refinery will be capable of processing 5,000 bbls. of crude per day. It will consist of new specialized equipment for skimming and cracking Sam Fordyce crude. This oil is of an unusual nature, containing little or no gasoline or kerosene.

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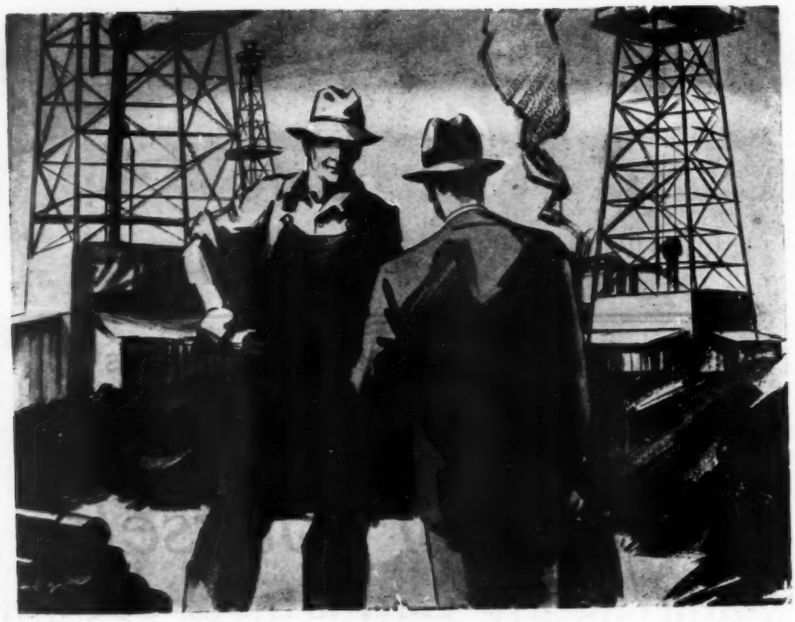

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Producers in Clarendon, Pennsylvania Area Use "Delayed" Five-Spot Plan

By R. C. CONINE

IS WATER FLOODING INEFFECTUAL outside the Bradford and Richburg oil sand areas of Pennsylvania? Must promising secondary recovery developments await "better times" for lack of cash? Is it possible to initiate a program with a comparatively modest investment and extend operations progressively on the returns on the first investment? These are a few of the frequently heard questions which are being answered by operators in the Clarendon Field today. The center of this activity is in Mead Township, Warren County, where air and gas repressuring failures once discouraged secondary recovery prospectors. Conducting water flooding operations in the Clarendon sand are the following companies: Cities Service, Schorman and Belleview Oil Corp.

Cities Service has pioneered in this flooding development. This company, as do the others, employs the five-spot pattern. There are now 8 oil producing wells and 15 water input wells on the Cities Service lease and 19 additional water wells are drilling at this time to extend the 20-acre development to 50 acres. Daily average production for each of the eight wells now producing is said to be slightly more than 15 bbls. As the development is of the "delayed" five-spot type, this production after nearly two years is unusual.

Work on the Schorman property is just getting under way with 12 wells down and taking water in the first step of a 20-acre delayed flood.

The most extensive project in this field, and the one which will be discussed at length here, is that of Belleview Oil Corp. of Bradford. The position of this corporation's tract in respect to other present and prospective developments is shown in the accompanying plat. The entire tract covers 270 acres and is divided into four sections as shown by dotted lines on the above mentioned diagram. Because of the plan employed in financing the project (completed recently) development will be carried out separately on each of the sections in the matter of drilling, but power, water treatment and other operations are conducted at a central plant, views of which accompany this article. In each section development will proceed as follows: First year, 13 acres; second year, 6½ acres; third year, 6½ acres; fourth year, 13 acres; fifth year, 13 acres; and sixth year, 13 acres. The 10 acres remaining will be fitted into the program.

Electric generator hooked up with heavy duty gas engine supplying the power

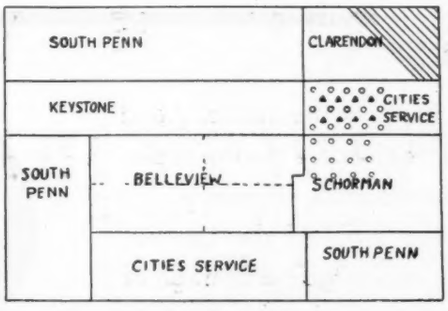


Diagram showing principal properties involved in water flood development of the Clarendon sand

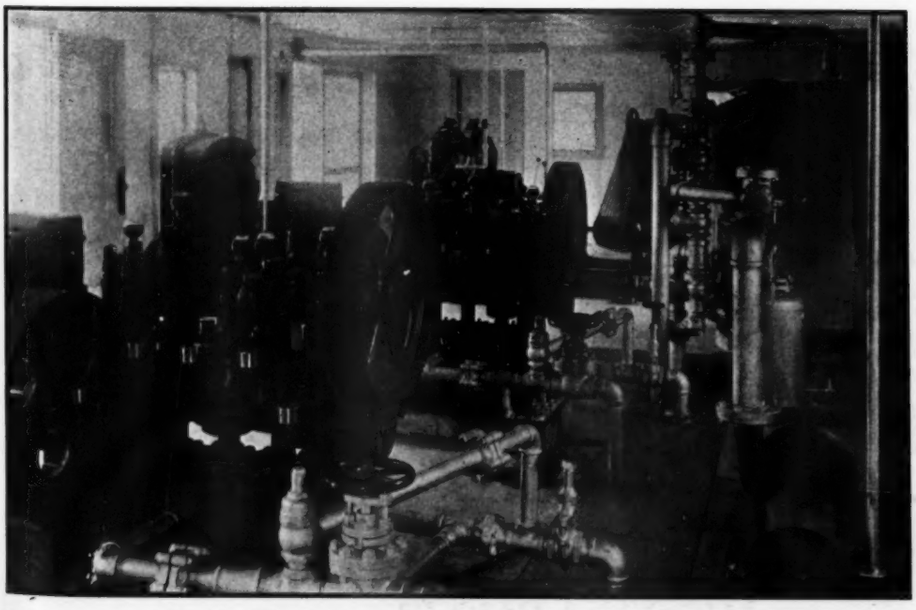
Thirty-two water wells have already been connected and drilling of producing wells will be started late in the fall as this is a delayed five-spot water flood. Distance of water wells to water wells is 330 feet, permitting each of the oil wells to drain 2½ acres. Top of the Clarendon sand is found at 1,000 feet, and thickness of the pay averages at least 31 feet. The sand has not been drilled through in any part of the tract because of danger of breaking into an underlying soft streak which would result in a plugging back job.

The pay sand has an average porosity of 14 per cent, saturation of 60 per cent, and, according to independent expert sources, shows an indicated actual recovery of 6,523 bbls. per acre. Pressure on the face of the sand transmitted by the inlet wells is 800 pounds per square inch. Cost of development has been estimated at $2,500 per acre.

Each of the water wells has been shot with 60 quarts of nitroglycerin. Larkin anchor packers and 1½-inch seamless steel tubing have been fitted in each of these wells. The packers are set in the cap rock on top of the Clarendon sand, and 110 feet of cement is placed on top of the packers.

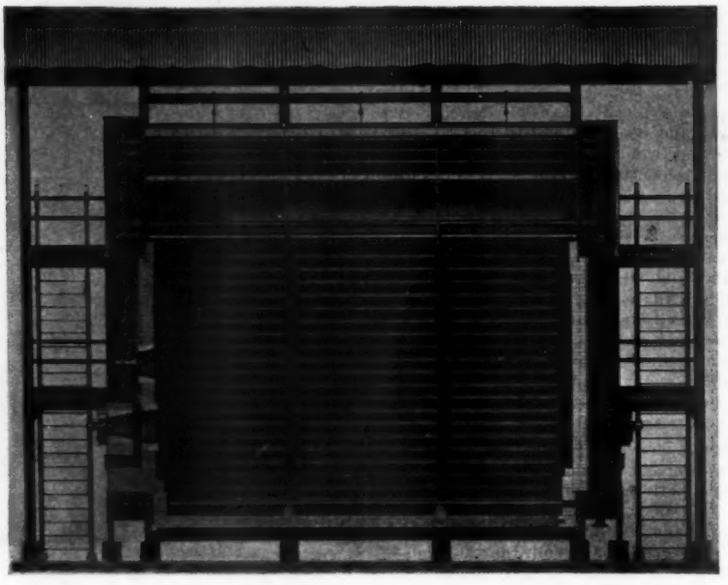
Installed in the power house is a 60-KW Westinghouse generator driven by a 100-horsepower Pierce-Arrow heavy duty gas engine. Electricity, while used now only for driving the Deep Well turbine water pump, the 5-horsepower Gould water circulating pump, the one-half horsepower lime feed pump, and for lighting, will later be used in pumping the wells.

Water to the input wells is propelled by a Worthington 2¾x6 triplex pumps driven through V-belts by Waukesha engines. Water is supplied by a Cook Deep Well turbine pump at a rate of 90 gallons a minute. The water comes from a gravel bed 83 feet below the surface and 25 feet in thickness. In a test 150 gallons a minute were pumped with 35-inch draw down. International lime feeding equipment is used to raise the Ph of the water from 7.2 to 7.8. The M test is raised from 127 to 135. An International 72-inch filter is between the lime feed tanks and the triplex pumps. Alum is added about 5 or 10 minutes before operation to provide a floc on top of the filter.



Triplex pumps driven by Waukesha engines provide water at 800 pounds pressure on the face of the sand. The International water filter may be seen in the background

HEAT LOSSES are unusually low



Among the factors that improve the capacity and efficiency of Lummus Oil Heaters are the low radiation losses and the high combustion efficiency.

Heat losses through the walls of the Lummus Heater are low because a very large percentage of the wall area is covered with heat absorbing surface which keeps wall temperatures very low and renders unnecessary an excessive thickness of insulating material.

This low radiation loss together with high combustion efficiency makes the Lummus Heater highly economical.

Write for 12-page technical bulletin describing Lummus Oil Heater

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LUMMUS

PETROLEUM REFINING PLANTS

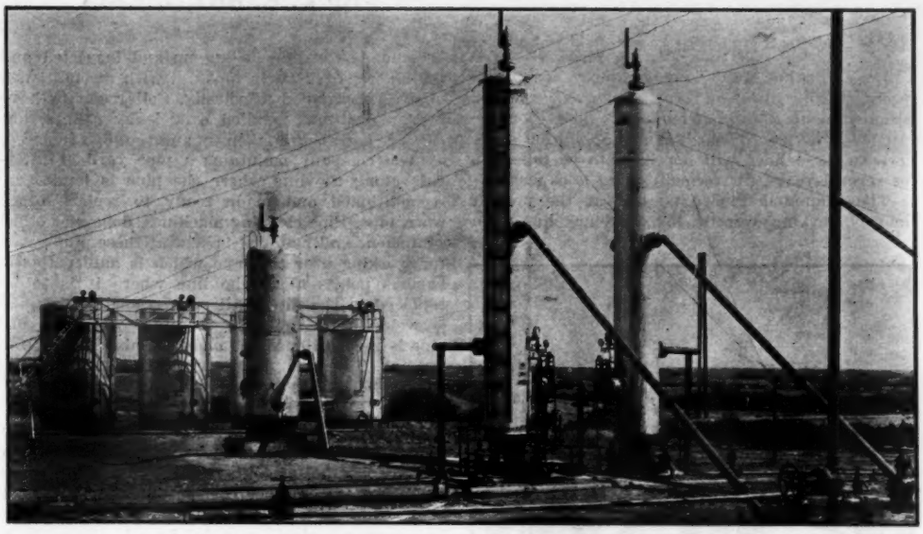
High Pressure Gas Well Successfully Tested and Produced Without Waste

SINCLAIR PRAIRIE OIL CO. and others completed No. 1 Franklin, SE NW SE Section 21-10-2w, Cleveland, County, near Moore, Okla., south of the Oklahoma City Field, last June, for a large gas well producing from the Wilcox sand at 7,269-91 feet. This well has been tested by the Bureau of Mines method, without opening it to open flow, and is capable of making 200,000,000 feet of gas daily with the well head pressure about 2,350 pounds.

The gas contains about 1.34 gallons of gasoline per 1,000 feet, having a gravity of 88.3.

Early in June the well was placed on production to deliver from 40,000,000 to 15,000,000 feet of gas daily to the Phillips Petroleum Co. in Oklahoma City, where it has been used in gas lift plants. This gas system consists of 5 miles of new 6-inch pipe, welded, and 4½ miles of old 6-inch oil line formerly belonging to Wirt Franklin tested to 1,800 pounds water pressure and leaks welded.

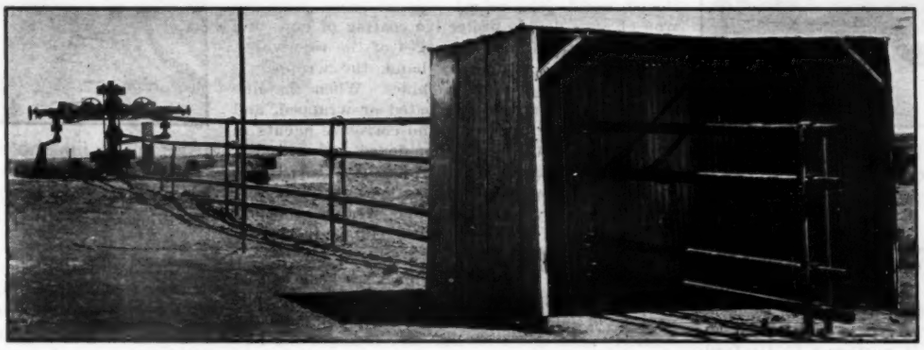
At first the well furnished about 25,000,000 feet of gas daily to this system and it was handled at the well head through heavy duty fittings tested for 5,000 pounds working pressure. The well head pressure is about 2,350 pounds and the gas passes from the well to two 30-inch by 18-feet high heavy duty gas traps where the pressure is reduced to about 1,200 pounds.



Gas traps and welded steel lease storage at high pressure well in Cleveland County, Okla.

During this pressure drop when the well was delivering 29,000,000 feet of gas daily from 2,000 to 2,400 bbls. of gasoline was precipitated each day. This was a highly volatile fluid and it was necessary to heat the control valves to prevent the liquid from freezing in the line between the high and low pressure traps.

From the high pressure traps the gasoline and some gas passes to one 5x16-foot high trap where pressures are reduced from 1,100 to 30 pounds. During this drop in pressure about 1½ gallons of gasoline is made per 1,000 feet of gas handled. As practically all of the gas produced by the well is delivered to the gas system from the high pressure traps only such gas as accompanies the fluid passes over to the second trap.



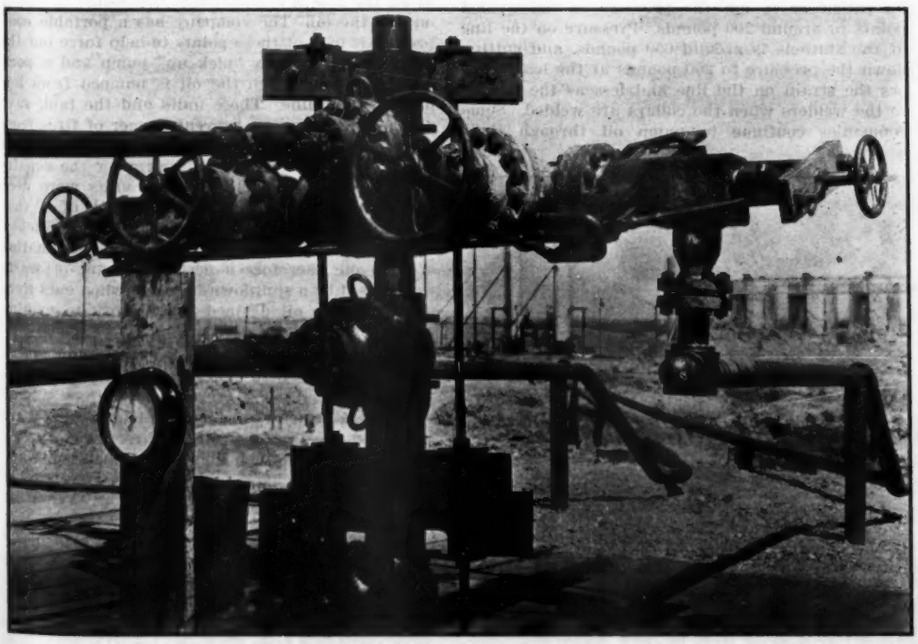
Remote control fittings installed as a precautionary means of handling the large gas well

The accumulated gasoline is piped into four welded stock tanks rated at 40 pounds working pressure but usually operated at between 20 and 30 pounds pressure. These tanks are provided with relief valves and the fluid is delivered to gasoline plants for further treatment.

This installation has been in operation since early in July and has given satisfaction. At present about 15,000,000 feet of gas is required by the gas system and to handle this volume the first traps are now working at about 800 pounds pressure and only about 1,200 to 1,300 bbls. of fluid is extracted daily.

While every precaution has been taken to provide equipment suitable for handling this hign pressure gas safely it is still possible some accident beyond human control might occur and to prevent the well from running wild a set of long distance controls have been installed, by means of which the valves can be opened or closed. This control system is built up of heavy pipe and operated by tongs in a shed set at some distance from the well as shown in the middle picture.

This system of multiple traps for handling gas from high pressure wells has been installed at more than 30 other gas wells in this country. In some instances three sets of traps are used to make the reduction in pressure between units more gradual and this three-trap system would have been installed at this well if space and other conditions had permitted. It is understood that wells with as high as 3,000 pounds pressure at the surface are being handled successfully by this means and waste of gas and gasoline eliminated.



Well head connectings and fittings on large gas well near Moore, Cleveland County, Okla.

Stanolind Replaces Long Sections of Line Rather Than Repair Parts

By L. E. BREDBERG

THERE IS, AS YET, NO UNIVERSAL method used by pipe line companies in reconditioning lines, and companies are still experimenting to find what method is most economical. They desire to repair and recondition their lines so these lines will not have to be taken up for several years, for reconditioning is expensive.

The Stanolind Pipe Line Co., at the present time, is working over its 45-mile 8-inch line from

Auxiliary unit used in picking up oil from low places in pipe line where oil cannot be sucked out by main station pumps

its Ranger Station in Eastland County, Texas, to its Graford Station in Palo Pinto County. This line takes sulphur crude from West Texas from the Humble Pipe Line Co. at the Ranger Station, to which point the latter company delivers from West Texas, then moves it northeast to Graford Station and up to Healdton, Okla., by way of its trunk line. The sulphurous crude makes it necessary to recondition lines more often.

This line was laid in 1918 and 1919, was partially reconditioned about three years ago. At that time collar leaks were repaired, half soles, sleeves and other patches were welded on and pit holes were welded. All such half soles, patches, sleeves, saddles and badly corroded spots are now being eliminated from the line by sections of the line being cut out and new or reconditioned pipe being used as replacements. The practice of replacing sections is considered most economical in that the line will not then need to be taken up for several years, except where collar leaks may cause trouble. It is a screw line and consequently contains some old cast iron flanges, nipples and unnecessary gates and other connections. These are being eliminated, thus removing connections where corrosion is most pronounced.

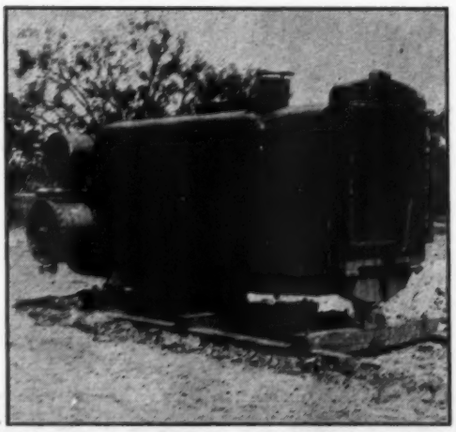
Some pipe line companies believe in making many pit hole welds, placing on half soles, sleeves and other patches, but the Stanolind Pipe Line Co. now believes that it will be more economical to eliminate such piece-meal repair work. For this reason it is replacing this patched-up line.

All water courses, such as creeks, ravines and dry stream beds, are considered as potential corrosive points on the line, therefore the line is always inspected at this point, as well as at all road and highway crossings. Bell holes are dug by hand to the pipe, regardless of the detector survey's report on the line, and the pipe is carefully inspected as to its condition. Where repairs have previously been made the line is dug up and inspected and the old repaired parts replaced with reconditioned pipe, as mentioned previously. Collar clamps have previously been installed over leaky collars, but these too are being taken up and the pipe replaced.

The company maintains a pipe yard at intervals along the line where the pipe is hauled in, reconditioned and made ready to replace other worn pipe. Pipe cleaning machines, dope and other equipment and material is kept at these pipe yards for working over the pipe which is hauled to the various points along the line where it is to be replaced in the ditch. All such reconditioned pipe is welded into the line, therefore when the old pipe is reconditioned the ends are also beveled for welding. The pipe yards are moved along the line when and where needed so that long hauls of pipe are eliminated.

When the reconditioned pipe is prepared for relaying it is given a primer coating of paint, two coats of parolite asphalt, is wrapped with asbestos felt paper and another coating of parolite is used in covering the wrapper. A couple of places in the line were excessively corroded by salt water which flowed over and under the line from old or abandoned wells. The relaid pipe at these junctures was given a double protective coating of dope and paper to withstand the ravages of the salt water. The coating is applied by hand, the wrapper is placed on the pipe by machines. When the line was first laid it was not coated or wrapped, and where there are apparently no corrosive agents in the soil the relaid pipe is not doped and wrapped, but is only primed. Where there have been leaks in the line, however, these sections of relaid line are always primed, coated and wrapped to prevent chances of corrosion setting up in the reconditioned and relaid line.

Most of the leaks in the line have been caused or set up around the collars, with but few split sections of pipe having been found. The company formerly shut down its line, not transporting any oil through it, when collars were welded to stop the leaks, but it is now only shutting down to such an extent as to cut the pressure at the welded points to around 200 pounds. Pressure on the line at the stations is around 650 pounds, and cutting down the pressure to 200 pounds at the leaks lowers the strain on the line and lessens the danger to the welders when the collars are welded. Some companies continue to pump oil through their lines at the regular pressure when welding leaks in the line, but this is considered, and has been found to be a dangerous practice in the field and before the line is shut down for repairs several sections of various lengths are prepared to be taken out and replacements made. The reconditioned pipe is placed beside the ditch at point where it is to be welded in on the line. When the line is shut down, cuts are then made by the welders, the old



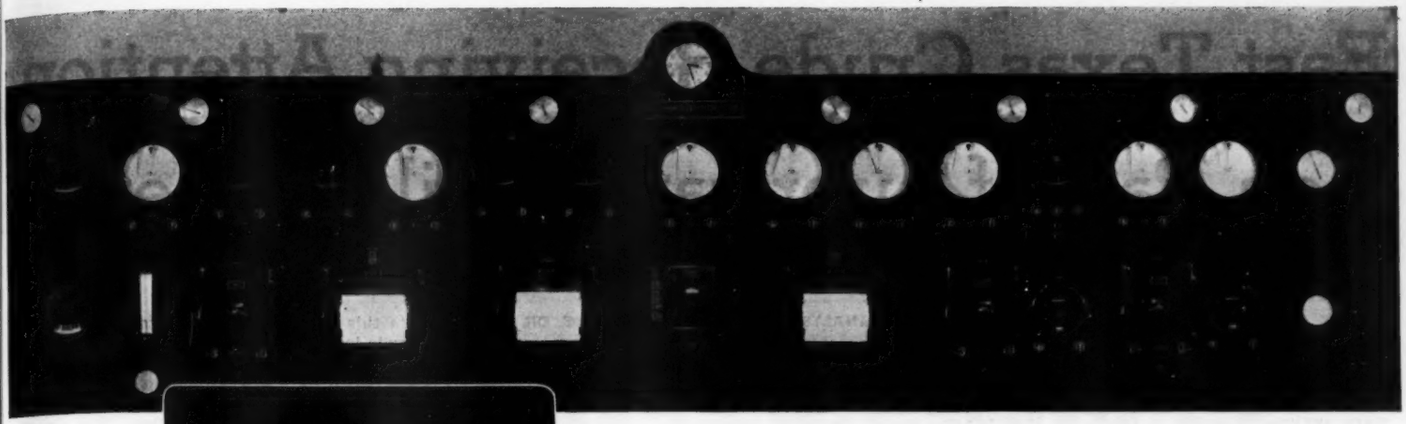
Portable compressor unit used in forcing oil from line before line is shut down for making cuts and replacements

Aluminum jigs hold the line at the collars as the line is welded under pressure. These are clamped to the pipe on each side of the collar to prevent a blowout during welding

section or leaky section of line is cut out and the new or reconditioned pipe is lowered into the ditch and welded into the line.

When a line is shut down the pumps at the stations are used in pulling it as dry of oil as possible. However, in low swags at certain places along the line it is sometimes impossible to siphon out all the oil. The company has a portable compressor it uses at these points to help force out the oil, has an auxiliary "pick up" pump and a portable tank into which the oil is pumped from low places in the line. These units and the tank save all the oil in the line, prevent danger of fires from waste oil and the salvaged oil can later be pumped back into the line from the tank after the repairs are made. Before such salvaging units were used there generally were a good many barrels of oil that had to be drained from the line into pits or ditches. Burning was about the only method of elimination of such oil, therefore a certain amount of waste was caused by a shutdown in a line when cuts were made and the oil drained preparatory to making replacements.

Much of the line being inspected and reconditioned is located in rugged country, and the majority of the ditches are so short, that manual labor is being used to do the ditching instead of machines. Road crossing lines are always reconditioned and the 8-inch line is laid inside of a section of old 10-inch pipe which is used as another form of protection for the transporter. Vents are placed on these sections of 10-inch line so that in case of a leak or break in the 8-inch inside of the 10-inch there will be an opening through which the oil and gas can escape to the surface, thereby preventing an explosion in the pipe under the highway. This road crossing protector is described in an article on page 13 of the June 13, 1935, issue of The Oil and Gas Journal.



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2. Wide Throttling Range.
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East Texas Crude Receiving Attention on Part of Lubricating Oil Refiners

THE POSSIBILITIES OF EAST Texas crude oil from the standpoint of manufacturing lubricating oils is receiving more and more attention among refiners in the United States and foreign countries. Refiners of lubricants are always anxious to secure a crude for that phase of their operations which is uniform in quality and which can be relied upon as a supply over a period of several years. This situation enables them to perfect processing methods in line with their marketing requirements on a more or less permanent basis without the frequent changes necessary when a variety of crude stocks are used.

East Texas crude is especially attractive from these angles. It has been the largest single supply of the petroleum industry over the past three years and readily available to major refiners with plants along the Gulf Coast and Atlantic Seaboard and several foreign points. From present indications this situation will continue for an indefinite period. In regard to specifications, the East Texas crude despite the large daily volume is remarkably uniform with not enough variation in the lubrication oil fractions to complicate processing methods.

This particular description is concerned only with the viscous and nonviscous neutral cuts obtainable from the paraffin distillate fraction of a representative grade of East Texas crude oil. A later article will discuss developments in regard to handling the overhead cylinder stocks of the crude. This crude supply until recently was not considered desirable from the cylinder stock end due to the large wax content and other properties which meant substantial treating losses. Certain operators who are using the crude in large quantities in refining light oil products are now considering its desirability in manufacturing practically all grades of paraffin base lubricants. The advent of solvent refining and solvent dewaxing is the development which is making the heavier oil fractions of East Texas more attractive as lubricating oil material. Recent operations, it is said, have definitely established the fact that refiners can use this heavy crude fraction economically in securing satisfactory yields of quality lubricating oils.

The operation on which this description is based has been used at an eastern refinery over the past three years. It is not maintained that there is anything unusual about the method of operation or the results obtained. It is described here as a representative operation which answers the frequently asked question as to the neutral oil and wax content of East Texas crude oil. There are other refineries in the United States and foreign countries which have approximately the same operation, the small variations in yields being explained by the differences in equipment and the specifications of finished products required by the companies.

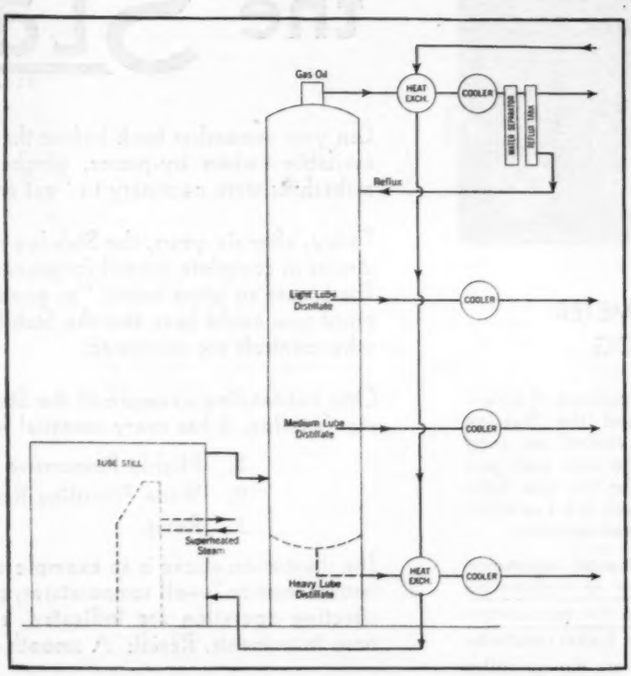
The uniformity of East Texas crude oil was indicated in a tabulated analyses of Texas crude oils compiled by the United States Bureau of Mines early this year. This report gives an analyses of crude samples taken from wells in all sections of the field. While there is some difference in gravity and light oil content, the report shows that specifications of the crude vary little in the several analyses. The following table summarizes the data taken from the government report issued in December, 1934:

ANALYSIS OF EAST TEXAS CRUDE OIL
Woodbine sand, Gregg County, depth 3,550-3,578 feet

Color—Green black.
Gravity—39.8 A.P.I.
Viscosity at 100 (Saybolt seconds)—40.
Pourpoint—45° F.
Sulphur content—20 per cent.
Base of crude—Intermediate.
Indication of wax—Present.

	Per cent
Gasoline, light, 78.4° gravity	14.4
Total gasoline and naphtha 63.1° A.P.I.	36.7
Kerosene, 42.6° gravity	10.0
Gas oil, 35.8° gravity	16.2
Nonviscous lubricating oil distillate, 32.7-28.9° grav.	9.5
Medium lubricating distillate 28.9-26.6° gravity	6.8
Total distillate	76.1
Residuum, gravity 17.5	21.5
Carbon residuum	6.9
Carbon residuum of crude	1.5

At one refinery the light oil operation is carried on, to secure 370 endpoint gasoline with a large yield of kerosene. Representative results from this two stage operation on the light oil side of the refinery are as follows:



Drawing showing main features of pressed distillate rerun unit operating with cuts obtained from East Texas crude oil

ATMOSPHERIC OPERATION

Product—	Per cent yield
Gasoline	25.4
Gravity 64.1.	
Initial 97° F.	
E. P. 370° F.	
Kerosene	18.0
Gravity, 42.7.	
Initial 358° F.	
E. P. 548° F.	

VACUUM OPERATION

Gas oil		6.7		
Gravity 35.7.				
Wax distillate		17.0		
Gravity 30.2.				
Long residuum		32.0		
	Gravity	Per cent yield	Yield after acid treat	Vis. at 100° F.
	22.2	18.0	16.52	305
	25.0	2.0	1.89	153
	26.5	38.0	36.39	104
	31.3	30.0	28.83	52
	32.7	12.0	....	Gas oil

The crude oil received at the eastern refinery is transported from field storage by pipe line to storage at a Gulf Coast terminal. From there it is shipped by tanker as needed to the refinery. Due to this transportation and storage operation, the crude loses some of its light fractions through evaporation. The crude is separated into its fractions in a two stage distillation pipe still unit. The gasoline and kerosene are first topped from the crude in an atmospheric operation. The topped crude is picked up at the base of the atmospheric tower and charged to a second still and fractionated in a vacuum tower so that all but approximately 15 per cent of the crude charge is taken overhead.

The wax distillate cut amounting to approximately 1,700 bbls. daily at present is removed to the lubricating oil side of the plant's operation and the wax removed in the usual manner of cooling and pressing. The wax content of East Texas crude is large. At this refinery an average yield of 1.96 per cent is secured on the crude charge or approximately 11.5 per cent on the wax distillate cut based on 125 melting point material. As previously explained larger yields, exceeding 2 per cent on the crude charge, are obtainable from a larger wax distillate cut.

Representative specifications on the paraffin distillate and pressed distillate after the wax has been removed are as follows:

PARAFFIN DISTILLATE

Gravity	30.2 A.P.I.
Viscosity at 100	75.
Flash	330.F
Cold test	75.F

PRESSED DISTILLATE

Gravity	27.7
Viscosity at 100	82.
Flash	315.
Cold test	14.

The Foster Wheeler unit used in distilling and fractionating the pressed wax distillate to secure the finished oils was built four years ago and follows the conventional design for that type of operation. The pressed distillate charge is preheated by the overhead gas oil vapors and the residual distillate from the base of the tower. The preheated oil at a temperature of 440° F. is brought to a temperature of 720° F. in the tube still. The charge is then discharged near the base of the tower.

The cuts taken from the tower are dependent on the requirements of the marketing department. The accompanying flow diagram shows an operation in which the gas oil is taken overhead, with two side streams and a residue cut from the base of the tower. Five cuts are taken from the tower in some operations. This company both within and outside its own operations, has outlets for a large number of products coming within the viscosity range of the pressed distillate. It has a large outlet for viscous neutrals ranging from 100 and 300 viscosity. It also supplies a large industrial demand for red and pale oils.

The following table summarizes an operation in which five cuts are obtained in which the main operation is based on 920 or 300 viscosity neutral:

The products require only a light acid treatment. Through automatic control the operation as indicated above can be varied to obtain cuts of any desired specifications.

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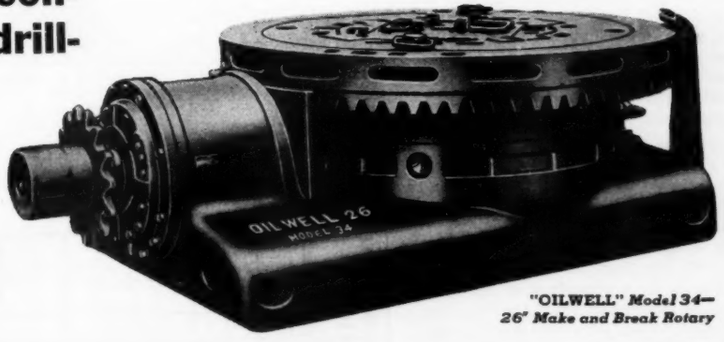

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Natural Gas Industry Is Aided by Use of Underground Storage Reservoirs

By J. H. DUNN
Lone Star Gas Company*

WHAT WOULD IT MEAN TO the natural gas industry to find a way (1) to improve operating load factors; (2) to provide for a margin of safety during peak demands; and (3) to eliminate the waste of gas? The storage of gas in natural reservoirs does not offer a simple nor complete solution of the problems, but offers a measure of relief with increasing possibilities.

The Lone Star Gas Co. has established and has in operation at this time underground storage facilities sufficient to reduce the difference between the maximum and minimum day by 20 per cent. Figure No. 1 in connection with this paper illustrates the possibility offered by gas storage toward load stabilization. The result of such operations will be to raise the rate of production from the regular sources of supply during low demand, and to lower the rate of production from these same sources during periods of high demand for gas.

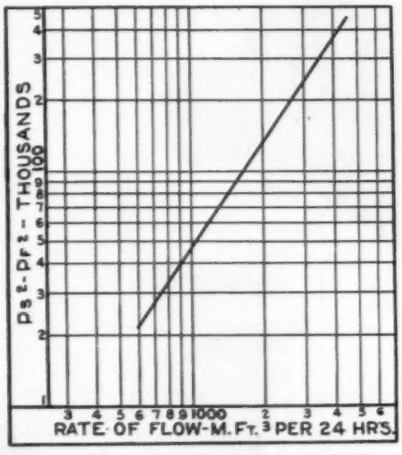


Fig. 2—Flow characteristics—well No. 1

There can be little doubt but that the possible advantages from gas storage are desirable in the operation of any natural gas system. There may be, however, considerable doubt as to the justification for such operations.

Before one could be expected to indorse a procedure calling for the storage of gas in the ground the cost must be weighed against the benefits, and there must be definite assurance of the future recovery of the gas stored.

Unfortunately, suitable reservoirs for this service are not plentiful, but they may be made more plentiful in the future by a procedure in the operation of our present sources of supply which contemplates gas storage. Even then only certain ones of our reservoirs will lend themselves favorably to such operations.

The most suitable reservoir for this service is one which has not ceased producing. It is more suitable because at the outset we find the wells ready either to receive or produce gas. We find the entire reservoir alive, so to speak, and we usually find a sufficient number of wells in place to provide the necessary means of withdrawal after storage. The rate at which gas may be injected is governed by the same factors which determine the rate at which gas may be produced from any certain well, and gas will flow "into" or "out of" a reservoir in like volumes when comparable pressure differentials are established.

As a general proposition a reservoir is suitable for gas storage if it has consistently produced gas according to Boyle's Law, properly applied. We do not expect to find a reservoir entirely free of liquid. If, however, any reservoir has produced gas satisfactorily on a normal decline from its initial pressure down to its present pressure, we may expect to be able to build up the pressure by injection, and again produce gas down to that same pressure, or lower, without loss due to liquid. On the other hand, if the liquid has been serious enough to have prevented the proper recovery of gas in the beginning, it probably will be serious enough to cause a loss if storage is attempted.

TABLE NO. 1—DETERMINATION OF RESERVOIR CAPACITY

	Initial	Present
Gauge pressure at surface	1,250.0	140.8
Absolute pressure at surface	1,264.4	155.2
Bottom hole factor	1.0791	1.0918
G=.71 & .62; L=3,092; T=50° F.		
Absolute pressure at sand (P)	1,364.4	169.4
Deviation factor	1.2324	1.0218
Pd	1,681.5	173.1

Q=15,130,462 M cubic feet=Total withdrawal of gas from beginning of operation to the present time.

$$\frac{Q}{Pd(Initial)-Pd(Present)} =$$ Volume of production (corrected for deviation from Boyle's Law) per pound reservoir pressure drop. (Pounds per square inch absolute at the sand face.)

$$\frac{15,130,463}{1,681.5-173.1} = 10,031 \text{ M cubic feet.}$$

TABLE NO. 2—CALCULATION OF RESERVOIR PRESSURE

(Pounds per square inch gauge at the surface)

Resultant from the Injection of 2,000,000,000 Cubic Feet

Bottom hole pressure (pounds per square inch absolute) times deviation factor at start of injection. 173.1

Bottom hole pressure (pounds per square inch absolute) times deviation factor at end of injection of

$$2,000,000 \text{ M cubic feet} = \frac{2,000,000}{10,031} + 173.1 = 372.5$$

199.4 + 173.1 = 372.5

Pd = 372.5

d (by trial) = 1.0514

∴ P = 354.3 = Bottom hole pressure (lbs. per sq. in. absolute)

Bottom hole factor = 1.0837 (G. assumed = .75)

$$\frac{354.3}{1.0837} = 326.9$$ = Pressure at surface (lbs. per sq. in. absolute)

326.9 — 14.4 = 312.5 = Pressure at surface (lbs. per sq. in. gauge)

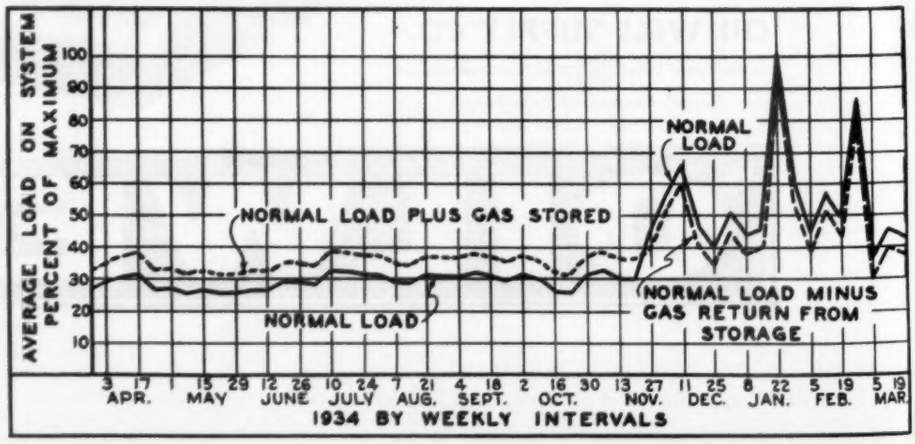
It is my intention here to deal only in generalities with reference to the cost of operation. Ordinarily we will find that we have the facilities at hand sufficient to handle the gas for storage. Usually the facilities are already in place for carrying the gas away from a field and these same facilities may be used to carry the gas to the field. If we have been taking gas out of a field and compressing it in order to get it into the main line, we can reverse our connections and take gas out of the line and compress it in order to inject it into the wells. If such operations are to be conducted by cycles, one portion of the cycle to be made up by injection and the other portion by production, no additional major facilities would be necessary in order to handle the gas. Under circumstances of this kind, if storage of gas is justified, the cost of handling the gas will be justified.

Usually the major investment to be made in connection with gas storage will result from the cost of the gas to be stored. If distress gas is to be stored for future use the price paid should allow for the cost of storage, and the conservation resulting will go a long way toward justifying the operation. If, however, the benefit is to be derived during peak demands from the relief offered to an over-taxed available supply or facilities, a reduced cost of gas may not be necessary to make the project feasible.

It is preferable, of course, to own all wells producing from the reservoir to be used for storage. It is desirable further to own all of the acreage involved which could be drilled into production. If the gas rights or royalty cannot be acquired at a reasonable cost, it may be possible to establish a rental basis or a reduced royalty basis. The incentive to the royalty owner to cooperate lies in the prolongation of the life of the field and hence for him a greater ultimate revenue. Gas reservoirs covering small areas are easier to control and may be considerably less expensive to acquire.

With reference to the justification of the cost of storage operations, we should keep in mind the fact that we are establishing increased known gas reserves at points on our system where we are prepared to utilize the future production without additional pipe lines and facilities. This fact will not only tend to reduce future capital expenditures but will also postpone the necessity for the abandonment of facilities which would otherwise be subject to early abandonment.

In order to outline a suggested procedure to be followed to determine the suitability of any reservoir for storage, let us take a specific example. The reservoir which is to be used as an example


AVERAGE LOAD ON SYSTEM PERCENT OF MAXIMUM
NORMAL LOAD
NORMAL LOAD PLUS GAS STORED
NORMAL LOAD
NORMAL LOAD MINUS GAS RETURN FROM STORAGE
APR. MAY JUNE JULY AUG. SEPT. OCT. NOV. DEC. JAN. FEB. MAR.
1934 BY WEEKLY INTERVALS
Fig. 1—Illustration of the tendency of gas storage operations to stabilize load conditions

*Read before Natural Gas Department of A.G.A.A. at Memphis meeting.

covers an area of approximately 2,000 acres. Its stage of depletion before storage operations were started was such that slightly more than 15,000,000,000 cubic feet of gas had been produced, causing a decline in gauge pressure at the well head from 1,230 pounds gauge to 140 pounds. There are 15 producing wells which are considered adequate to serve in storage operations. The field otherwise meets the physical requirements for storage.

The data and calculations which show the reservoir's capacity to hold gas in terms of volume per pound of pressure are set out in Table No. 1. Theoretically, of course, the reservoir has the capacity to hold 15,000,000,000 cubic feet of injected gas before its original status would be reproduced. From a practical standpoint, however, our storage capacity will be governed by the pressure limits set by our operating facilities. In this case the facilities consist of a compressor station and pipe lines previously used to handle the production and a working pressure not to exceed 425 pounds is considered a safe operating limit.

Carrying our illustration forward we will assume that it is desired to store 2,000,000,000 cubic feet of gas during the first period of injection. In this particular reservoir the pressure would be increased from 140 pounds to 313 pounds (weighted average) after the injection. (Table No. 2.) Our operating pressures would, therefore, come well within the practical limits provided the injection is made over a period of time sufficient to permit the wells to receive the gas.

Having found the reservoir's capacity to hold gas between certain pressure limits, it then becomes necessary to determine the period of time that will be required to inject the gas under available operating pressures. Such information is determined from the "flow characteristics" data on the individual wells. The "flow characteristic" of a gas well may be defined as the relationship between any working pressure on a well and the corresponding delivery rate. (See appendix.) Figure No. 2 shows the flow characteristic from a test of Well No. 1. (Data shown in Table No. 3.) The flow characteristic of this well is such that it will receive gas initially at the rate of 1,300,000 cubic feet per day with a working pressure of 310 pounds gauge at the well head. Likewise from the flow characteristic curve we may determine the injection rate to be expected at various other operating pressures. Similar information must be obtained for each well and a summary of the injection rates at a given operating pressure gives the total initial injection rate for the reservoir.

If it is desired to maintain a constant injection rate throughout the period for injection, operating pressures must be increased in accordance with the increase in reservoir pressure. Since we know the effect on the reservoir pressure of the injection of a definite volume of gas, we may calculate in advance the rate at which the wells individually will be receiving gas at any stage of our operations. In other words, knowing the reservoir pressure and the operating pressure at any given time we may determine the injection rate from the flow characteristic curves of the individual wells. It is possible in this manner to determine the period of time required to inject a definite volume of gas.

TABLE NO. 3—DATA FOR FLOW CHARACTERISTIC TEST

Well No.: 1 — Date: April 18, 1935
Sand: 3,065-3,104 — Total depth: 3,122
Size of casing: 6⅝" — Set at: 3,045
Size tubing: 1" — Set at: 3,122
Producing through: 6⅝" — Rock pressure: 198 lbs. (66 hrs.)

	Work. Read. pres. (gauge)	Disc.	Coeff.	Pres. gauge	h	Temp. F.	
1	256	4"x1½"	495	300	14.1	60°	G—0.70
2	275	4"x1½"	495	302	21.3	60°	L—3085
3	287	4"x1½"	495	299	28.1	60°	GL—2160
4	310	4"x1½"	495	313	38.0	60°	Bar—14.4

Calculations

Rates of flow:

1 $495\times24\sqrt{314\times14.1}=$ 792
2 $495\times24\sqrt{316\times21.3}=$ 976
3 $495\times24\sqrt{313\times28.1}=1{,}118$
4 $495\times24\sqrt{326\times38.0}=1{,}323$

Pressures:

	R.P. abs.	Wt. of gas col.	P_f	W.P. abs.	Equiv. GL	R	P.D.	P_t	Wt. of gas col.	P_s
1	212	16	228	270	0.12	5	—	270	21	291
2				289	0.12	6	—	289	23	312
3				301	0.12	7	—	301	23	324
4				324	0.12	8	—	324	25	349

Plotting data:

	P_s^2	P_f^2	$P_s^2-P_f^2$	Q
1	84.68	51.98	32.70	792
2	97.34	51.98	45.36	976
3	104.98	51.98	53.00	1,118
4	121.80	51.98	69.82	1,323

The example which has been set forth in this paper is based entirely on actual data, and represents advance calculations which have been proven to be accurate within reasonable limits. The accuracy of such calculations depend upon the correctness of the basic data. Such information is considered of definite value in connection with gas storage because it provides a means of planning operations, and of determining the status of the gas in the reservoir at any given time.

TABLE NO. 4—WELL "A"—OUT-FLOW TEST

Date: August 22, 1934
First sand: 2,425 — Last sand: 2,630
Size of casing: 8¼" — Set at: 2,163
Size tubing: 268' 6⅝" liner — Set at: 2,410 (approx.)
Total depth:
Producing formation:
Producing through ⅝ 8¼" — Shut in pressure: 298 lbs. per sq. inch gauge

Observed Data

	Work. Read. pres. (gauge)	Disc. (4")	Coeff.*	Pres. gauge	h	Temp. F.	
1	287	¾	55.9	287		67	G—0.698
2	278	½	100.1	278		67	GL—1765
3	267	¾	155.9	267		67	Bar—13
4	253	¾	223.5	253		68	

Calculations

Rates of flow:

1 $300\times\ 55.9\div19.22=$ 872 M cu. ft. at 14.4 lbs. per sq. in., 60° F., and observed sp. gr.
2 $291\times100.1\div19.22=1{,}518$ M
3 $280\times155.9\div19.22=2{,}273$ M
4 $266\times223.5\div19.23=3{,}090$ M

Pressures:

	R.P. abs.	Wt. of gas col.	P_f	W.P. abs.	Equiv. GL	R	P.D.	P_t	Wt. of gas col.	P_s
1	311	19	330	300	.03	3	—	300	19	319
2				291	.03	5	—	291	18	309
3				280	.03	7	—	280	18	298
4				266	.03	10	—	266	17	283

Plotting data:

	P_f^2	P_s^2	$P_f^2-P_s^2$	Q
1	108.9	101.8	7.1	872 M
2		95.5	13.4	1,518 M
3		88.8	20.1	2,273 M
4		80.1	28.8	3,090 M

*Coefficient, M cu. ft. of gas per 24 hours at 14.4 lbs. per sq. in. abs., 60° F., and specific gravity of 1.0.

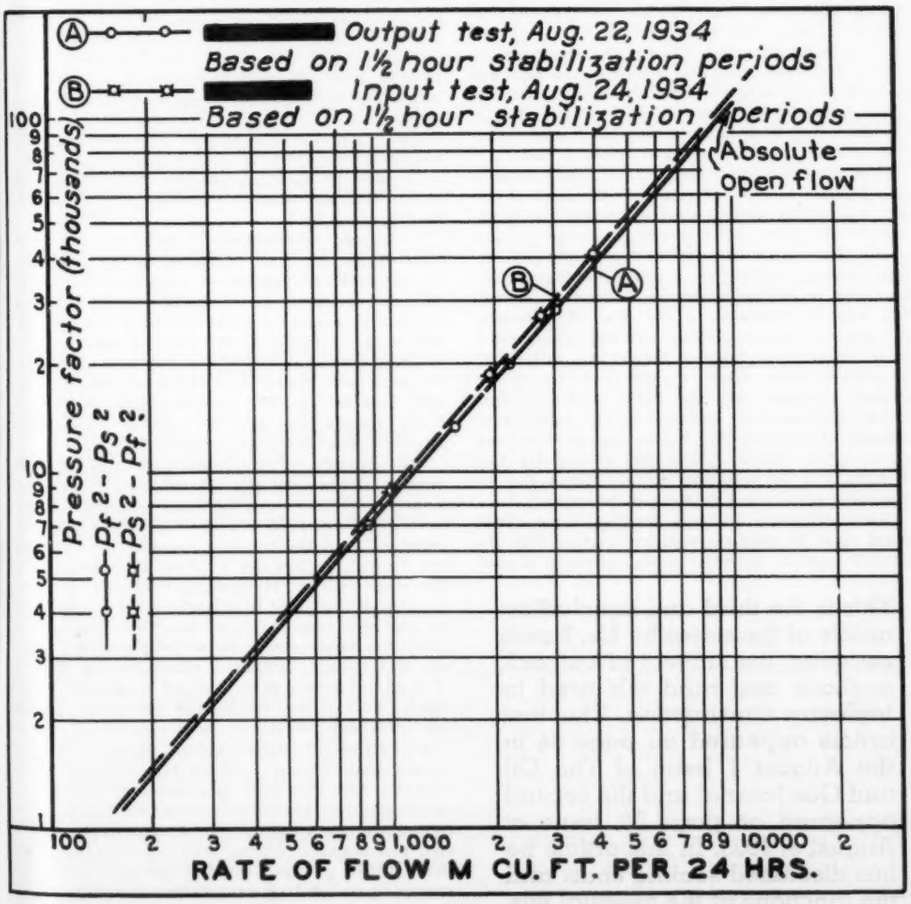


Fig. 3—Comparison of output and intake characteristics of well "A"

Gas storage on a definite basis may properly fit into the operations of an increasing number of natural gas systems in the future. It is, therefore, hoped that this paper has given some helpful suggestions to those who contemplate its use.

With respect to the prediction of the rate at which gas injection can be made, some very interesting facts have been disclosed recently which concern this point. Various experiments have been conducted which demonstrate conclusively the relation between the flow characteristics of a gas well on production and the flow characteristics on injection for the same well. The theory on which these experiments were based is furnished by various publications of the U. S. Bureau of Mines, among which is "The Study of a Fundamental Basis for Controlling and Gauging Natural Gas Wells" which is presented in two parts in Reports of Investigations Serial Nos. 2,929 and 2,930. This work of the Bureau of Mines establishes a fundamental relationship between any working pressure on a gas well and the corresponding delivery rate. More exactly, this relationship can be expressed in terms of volume of gas per day delivered versus the pressure expression ($P_f^2-P_s^2$) where P_f is the formation pressure and P_s is the working pressure both in terms of pounds per square inch absolute at the sand face. These ex-

periments to determine the relationship between out-put and in-take characteristics of natural gas wells have demonstrated that the characteristics for flow in one direction are substantially the same as for flow in the opposite direction.

Among these experiments were some conducted by the Bureau of Mines on four gas wells in the Texas Panhandle Field, the results of which have been set out by M. A. Schellhardt, associate natural gas engineer, U. S. Bureau of Mines, and have been approved by the Washington office of the Bureau of Mines for release to the committee on gauging gas well deliveries of the Natural Gas Department of the American Gas Association, but which have not yet been published. Of these tests one of them is being shown in connection with this paper in order to illustrate what may be expected in the relationship of out-put and in-take characteristics of natural gas wells. Under Table No. 4 are shown the data on the out-flow test. Under Table No. 5 are shown the data on the in-flow test. Figure No. 3 shows the plotted results of the two tests and completes the illustration.

TABLE NO. 5—WELL "A"—IN-FLOW TEST

Date: August 24, 1934

Observed Data

	Work. Read. pres. (gauge)	Disc.	Coeff.* 60°	Pres. gauge	h	Temp. F.	
1	311	1¾x6	19.80	384	7	72°	G—0.681
2	324	1¾x6	19.80	376	28.3	79°	GL—1720
3	335	2¼x6	43.0	368	11.7	80°	Bar—13
4	352	2¼x6	43.0	356	25.0	79°	

Calculations

Rates of flow:

1 19.8× 52.8×.989=1.033 M cu. ft. per 24 hours, 14.4 lbs. per sq. in., 60° F., and observed specific gravity.

2 19.8×105 ×.982=2,020 M

3 43.0× 66.8×.981=2,818 M

4 42.0× 96.1×.982=4,060 M

Pressures:

	Formation pressure P_f	W.P. abs.	Equiv. GL	R	P.D.	Wt. of gas col.	P_s
1	330	324	.03	3	—	19	343
2 (from production tests)		337	.03	6	—	20	357
3		348	.03	8	—	21	369
4		365	.03	12	—	22	387

Plotting data:

	P_f^2	P_s^2	$P_s^2—P_f^2$	Q
1	108.9	117.7	8.8	1.033 M
2		127.5	18.6	2,020 M
3		136.2	27.3	2,818 M
4		149.8	40.9	4,060 M

*Coefficient, M cu. ft. of gas per 24 hours at 14.4 lbs. per sq. in. abs., 60° F., and observed specific gravity.

Asphalt Proves to Be More Successful Than Oil as Sealing Coat for Roads

By H. G. NEVITT
Socony-Vacuum Oil Co., Inc.

CUTBACKS CONTAINING A proper distillate and a proper asphalt, the characacteristics of which strictly should be set by the subgrade conditions, can be made to meet the requirements listed, even though with our present knowledge its exact specification may not be perfect. It is equally evident that it is impossible to meet any but the first requirement, namely the proper consistency, with road oils on account of their failure to harden, and all the other functions cannot be obtained except temporarily by the use of roads oils. This statement is made in spite of the fact that much priming has been done in the past with road oil, and with apparently successful results; however, the complete results possible from priming were not permanently obtained if road oil was used. Except in the case of unusual absorption or adsorption conditions the material will continue to penetrate, and complete sealing will ultimately be lost. At the same time little bonding strength will finally be present and the increase in effective mat thickness, provided such was obtained at any time, will probably be lost as a result of the very thin films left on the subgrade particles. Finally the chemical stability of road oil under priming conditions, no matter how good the source of material, is always a question on account of the very thin films formed.

Turning to sealing, a definition of what is meant by this must be made or confusion will result. Seal coating as discussed here must be interpreted strictly as the addition of bituminous material to the surface of the present mat to strengthen and waterproof it with a minimum of cover material used. Forms of so-called sealing, where the present mat surface is treated with liquid asphalt followed by a considerable amount of aggregate, are not considered here as they are really additional construction layers of mat or stage treatments. These additional layers, armor coats, or similar are often desirable and may be used in the place of sealing as defined above; but they are not the same thing, nor is the discussion intended to include them. Sealing of the type described, primarily a construction and maintenance treatment of low cost to increase the strength and effectiveness of the present mat hold down maintenance expense, gives an excellent return on the amount expended provided conditions indicate its desirability.

The functions of the residual material from sealing are three. First an impervious film, with proper mechanical characteristics to prevent and continue to prevent the passage of surface water into the mat, must be obtained. The mechanical conditions here are much the same as those described for waterproofing with primers. A mere surface film which can be cut through by wear or injury is not sufficient, and the impervious condition must continue to some depth of the mat. Secondly, the seal coating must add strength to the surface by increasing the bond between the surface particles. These receive the greatest mechanical stress and the greatest wear. If the voids between them are filled with strong cement the tendency for wear and injury to the mat will be held to a minimum. Finally the seal coat material must be such as to retain these characteristics; that is, it must be physically and chemically stable against wear and other action.

The action of seal coats during application is very similar to that of primers. If above a certain consistency proper penetration will not be obtained. However, the viscosity cannot be too low or the penetration will extend too deeply into the mat, leaving insufficient material in the surface layer or requiring additional material (though this may be desirable in the case of extremely lean mats needing additional bitumen throughout). As in primers the relative penetration will be influenced to some extent by the character of the asphalt present. All the above characteristics will be influenced or modified by the presence of bitumen already on the mat particles. The sealing material will of course tend to dissolve this bitumen, and its resulting characteristics will be dependent upon those of the two products.

There will be a tendency for the thin material which must be used to penetrate further into the mat, or work up into the cover aggregate if such is used to any extent. This tendency will depend upon the consistency of the material, the quantity present and free to move, and the amount and type of bitumen already present in the mat. Hardening will be occurring as a result of volatilization of light fractions; absorption of the oil component, particularly light fractions, by the aggregate if any; and such tendency as may be present towards differential penetration or more rapid movement of the light fractions into the mat (if this effect is appreciable in the case of aggregate already coated with bituminous material, which is doubtful). Any volatilization or absorption will decrease the film thickness, and must be allowed for in considering quantities.

This is the third and concluding article of the series by Mr. Nevitt covering the subject of cutback asphalts and road oils used in highway construction. The first article appeared on page 34 in the August 1 issue of The Oil and Gas Journal and the second appeared on page 33, issue of August 8, 1935. In this article he has discussed sealing coats and the functions of the residual material used from sealing

Evidently the rate of hardening will have an important bearing upon both the migration tendency, and the length, of the tacky period. If the drying is too slow continued penetration will occur; if too fast the seal will not properly penetrate, leaving excess bitumen on the surface, which is undesirable for many reasons. From the standpoint of the tacky period the quicker the drying the better, as this will shorten the time in which pickup from traffic will occur. The proper hardening rate will generally be a compromise between these two effects. Finally, unless the rate of hardening is sufficiently rapid to set up strong, stiff film there will be a tendency for water displacement or similar action.

In the same way as the primer the numerous functions and duties required of a seal coat can be covered by two requirements. It must have the correct consistency to give sufficient but not excessive initial penetration in the desired amount; secondly, it must harden at the correct rate and give a hard, strong film completely filling capillaries to the desired depth, with a minimum of tacky period and with the characteristic of the residual asphalt suitable to give a strong, nonskid surface. Evidently a strict control of the liquid asphalt present is required.

Obviously a cutback can be made to meet the requirements listed, but a road oil can only be made to meet the first one, that of proper consistency. In practice road oil cannot be used to get any real results in sealing. If thin enough to penetrate its effect is to weaken rather than strengthen the mat, unless this has been an extremely lean job, and any effects obtained are temporary at best. If road oil of sufficiently high consistency to strengthen the surface is used a dangerous skidding condition probably will ultimately develop. In general it may be said that mats may be built up by the use of road oil, along with aggregate cover, but they cannot be really sealed by it.

It should be emphasized that with the large field of use for road oil listed in the preceding, the manifold advantages of cutback for the type of construction discussed in this article will not mean that a large market for road oils will not still exist; in fact it is the writer's opinion based on these uses that the rate of increase in the consumption will exceed that of the cutbacks in the very near future. The manufacture of road oil is much simpler than that of cutbacks. The latter involves many unforeseen expenses.

Consequently it is believed that even from the interest of the consumer the majority of road oil manufacturers should go along as at present. They have a logical field for their products, and the possibilities in the types of construction listed as practicable for the use of road oil offer a tremendous field of increase, particularly the soil treatments and oiled dirt roads. Just as the field for the high type pavement has about reached its limit, the much larger field for the mixed mats also has a limit, but many times greater mileage of roads requiring only road oil treatments is in sight. Most of the demands of this type such as low cost, easy availability, less accurate construction and product control, are exactly suited to the requirements of the road oil manufacturer, particularly with a by-product material to dispose of. In general the situation appears fortunate. The bituminous mats susceptible of more accurate design and material control will take advantage of the abilities of the asphaltic specialty plant to supply these requirements, while the greater mileage of low cost farm-to-market demands what the usual manufacturer of road oil has to offer.

OPERATING IDEAS

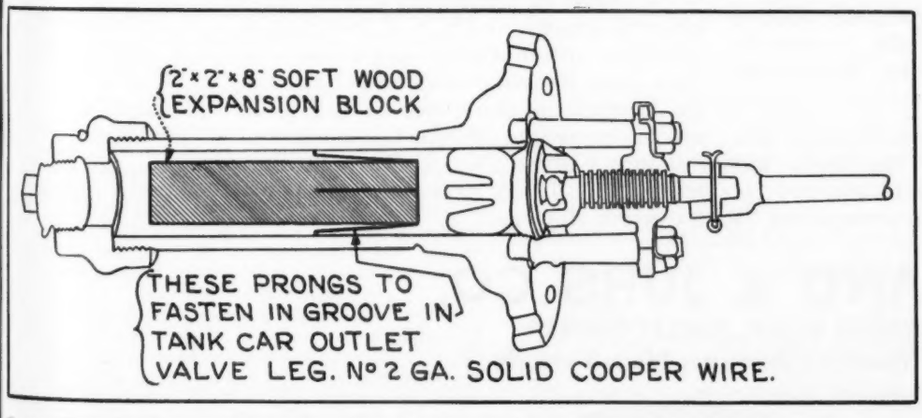
Hose for Sump Line

In the sump of a drilling well the coupling connection between the pipe from the pit and that leading to the pump has often proved a source of trouble. Not only is the metal connection placed under strain due to the extreme angle but it was also discovered that the vibration, set up by the reciprocating pumps, caused the metal to crystallize and soon develop air leaks. Drillers in the Seminole and Oklahoma City Fields solved the problem by substituting a 5-foot section of rubber suction hose.

Portable Electric Lighting Unit

In fields producing by gas lift considerable trouble is encountered from wells sanding up and collecting paraffin, which requires pulling tubing and cleaning out the well. This interrupts production sometimes for several days. One of the well servicing contractors has developed a portable lighting plant which he moves with his pulling equipment. With it in use he may continue the service uninterrupted day and night until the well is back on production. Portability of this unit allows illumination of the rig by merely stringing up a few lines while the daylight crew is in service. The outfit consists of a small gas engine directly connected to a generator with a capacity of about 2,500 watts, mounted on a two-wheel trailer.

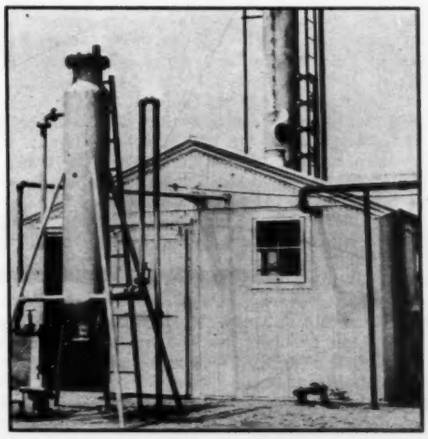
Avoid Bursting Tank Car Outlet Leg



One refiner in the northern states has eliminated the nuisance of having the tank car outlet valve leg freeze in winter by the use of small wood expansion blocks to which copper wires have been attached. The soft dry wood absorbs the moisture and is compressible to help prevent bursting by freezing. The copper wire is fastened to one end of the block as shown in the sketch and serves to hold the block in place. Before the wires were used many blocks would not be returned with the empty cars, resulting in some financial loss and the trouble of replacement. Solid No. 2 gauge copper wire is used, the wires being stapled to the top of the block. The ends are then bent around the four sides, prongs fastened at the ends, and these prongs fastened into grooves in the tank car outlet valve leg.

Fuller's Earth Filter

A novel pressure filter for removing color compound and gum from casing head gasoline is shown in the accompanying cut. The gasoline is passed through this filter under pressure. The earth may be quickly removed by loosening a plate on the bottom, and fresh earth may be dumped into the top in the same manner



S&J

A FIRE like that pictured at the left might easily have been started by a tiny spark from a nail in the heel of the shoe of your tank gauger when he had the gauge cover open. The S. & J. Gas Tight Automatic Tank Gauge shown above obviates the necessity for opening gauge covers, with resultant loss of gas and incident fire hazard.

WHEN a fire like this is raging on your tank farm it is too late to wish that you had equipped your tanks with S. & J. Flame Arresters, Explosion Vents, Gas Tight Cable Sheave Brackets, Sampling Wells, Automatic Gauges and other fire prevention equipment.

"Wishing" at that time is like locking the barn after the horse has been stolen. The time to make your tanks fire safe is when everything is serene on the tank farm and engineering judgment is not warped by a harrowing experience.

Most of the causes of tank fires are well known and S. & J. has provided many automatic devices to prevent fires from known causes and to protect the contents of the tanks from fires of unknown origin. Write for a copy of our new Catalog No. 52-B which illustrates S. & J. fire prevention and conservation devices.

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QUESTIONS ON TECHNOLOGY

By Charles K. Francis, Ph. D., Technical Editor

Quality of the Oil From Greendale and Porter Fields in Michigan

We are interested to obtain a representative analysis showing the refining values of the oil produced in Michigan. If you have such an analysis we would appreciate a copy.—T. C. A.

A detailed description of the Central Michigan Field has been given by Basil B. Zavoico in World Petroleum, 6, 309, 1935, and the analysis following is from this article.

ANALYSIS OF OIL FROM GREENDALE AND PORTER FIELDS, MICHIGAN

Properties of the crude oil:	
Gravity, A.P.I.	42 0
Sulphur, per cent	0.18
Viscosity, Say. Univ. at 70° F.	39
Color	dark green
Base	paraffin
Separation:	
Product	per cent
Gasoline, 325° F.-E.P.	23
Grav. 68	
Oct. No. 36	
Sulphur, % 0.03	
Naphtha	10
Grav. 53	
Sulphur, % 0.048	
Kerosene dist.	27
Grav. 43	
Sulphur, % 0.092	
Gas oil	12 5
Lub stock	10 0
Residue and loss	17.5

Topped crude oil, 55 to 60 per cent of original oil, yielded by cracking 60 per cent gasoline, representing 36 per cent of the crude oil. This gasoline was 61 gravity; tested 65 octane number and contained 0.06 per cent sulphur. The yield of reformed 400° F. endpoint 62 gravity gasoline was 72 per cent, or 25.8 per cent net; also 685 cubic feet of gas per barrel of charge.

Ignition Temperatures of Petroleum Products—Especially Kerosene

What is the difference in temperature at which gasoline will ignite spontaneously in air as compared with kerosene? Does this behavior of petroleum oil compare at all with vegetable oils as constituting a fire hazard?—B. C. D.

The petroleum oils are not easily oxidized, so there is no such thing as the spontaneous ignition of a petroleum oil at normal temperatures. The several animal and vegetable oils are quite easy to oxidize, a number of them unite with the oxygen of the air with such rapidity that enough heat is generated to cause combustible materials, wetted with them, such as rags, paper, shavings, etc., to ignite. Much destruction of property has been caused by this kind of chemical reaction.

While it is commonly recognized that the vegetable and animal oils must be used with care so as to avoid spontaneous combustion, there is no possibility for gasoline or kerosene to behave in a similar manner. The petroleum oils must be heated to a relatively high temperature before the point for self-ignition will be reached. These temperatures are of particular value to the refiner and those investigating the structure of hydrocarbons.

The spontaneous ignition temperatures of various fractions from different petroleums have been investigated by Wiezevich, Whiteley and Turner. Their results were reported in Industrial and Engineering Chemistry, 27, 152, 1935. The data discussed here are from this article.

Some tests in which the oils were dropped onto a heated plate, upon which a thermocouple was welded, indicated that none of the oils could be made to ignite below 950° F. Light fractions would form a ball, similar to that of water on a hot stove, and then distill away. Therefore hot surfaces up to 950° F. do not present a serious fire hazard, except where the surfaces are at least partially enclosed or where the volume of oil is large enough to form inflammable mixtures.

Tests in a closed ignition apparatus gave these spontaneous ignition temperatures: Kerosene, 480° F.; gasoline, about 550° F.; fractions of the lubricating oil range, 710° F.; and 810° F. for the last fraction.

The variations of the spontaneous ignition temperature (S.I.T.) in air of the several fractions from West Virginia crude oil are from Table 1, of the reference.

SPONTANEOUS IGNITION TEMPERATURES W. VA. CRUDE OIL FRACTIONS

Av. B.P. of fraction	Gravity A.P.I.	S.I.T. °F.
125	69.4	550
275	58.1	560
325	54.3	555
375	51.3	530
415	49.0	505
500	44.3	500
522	43.1	490
580	41.2	505
604	40.2	480
...	31.0	810

A very interesting fact shown by this work is the low S.I.T. for kerosene, and may, in connection with its low explosive range, explain the larger number of fatal stove fires that were kindled with kerosene.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit problems to Dr. C. K. Francis. Questions should give as much detail as possible. Inquiries must be signed but only the given initials will be printed. The source of questions is considered confidential. Questions requiring discussion of patents, the use of intricate formulas, extended computations, or cost estimates cannot be considered in these columns

Explosive Gelatin or Gum Dynamite Equal Terms for Explosive

A question has come up involving the use of the term "gum dynamite" in place of explosive gelatin and I wish to know if there is any reason for gum dynamite?—B. W. R.

Dynamite gets its name from the fact that the invention covered convenient and safe method for transporting and handling nitroglycerin. Various mediums might have been used but the material called diatomaceous earth weighed but little per volume and had a high saturation value, permitting various percentages of nitroglycerin to be added. Explosive gelatin is a recent invention providing for the storage of the explosive in a gelatin or gum medium. While diatom suggested the word dynamite the material has become well known as an explosive, the active material being nitroglycerin. Hence it appears reasonable to use the term gum dynamite for the gelatin form.

Silicosis Sometimes Develops From Cleaning by Use of Sand Blast

What can be the source of silicosis in a modern oil refinery?—A. F. P.

Silicosis is a disease resulting from the breathing of dust from stone or sand. Sand is essentially silica, hence the term silicosis.

Petroleum does not contain enough sand to cause it to be considered as a source of silicosis. The only way it may be introduced into refinery work is from the polishing or cutting machines and in the sand blasting operation for cleaning metals and stone.

An extract from the recent paper by R. S. Bonsib, read before the Oil City, Pa., meeting of the National Petroleum Association, June 6, 1935, explains the use of sand blasting in refineries.

"One of the most serious hazards which has been introduced by improved refinery operations is the possibility of contracting the dread disease silicosis by men doing sand blasting work unless special precautions are rigidly observed. Sand blasting was adopted at most refineries as an economy and efficiency measure. It is usually used on these jobs:

"(a) Cleaning inside of soaking drums and bubble towers to permit the application of a 'gunnite' lining which reduces the rate of corrosion.

"(b) A number of storage tanks and running pans have been sand blasted and 'gunnite' lined, also to prevent corrosion.

"(c) Header boxes or other similar parts have been sand blasted to permit a detailed and thorough examination for cracks and miscellaneous small parts have also been sand blasted to remove rust or corrosion prior to putting old parts back into service.

"(d) Window glass is occasionally sand blasted to make it opaque and reduce the glare of the sun.

"These operations are carried out at various locations, the soaking drum, bubble tower and tank operations each being inside jobs. Header boxes have been sand blasted in place and the other parts at the locations which is convenient from a handling standpoint. It is breathing the dust arising out of these operations which may cause silicosis.

"At the silicosis symposium held at Saranac Lake, N. Y., last June (June 22, 1934), it was stated that dusts in order to be harmful must be so fine as to reach air sacs of the lungs and also fine enough so as to permit them to be engulfed by phagocytes; that is, they must be less than 10 microns in size or 10/2,500 of an inch. Many particles reaching the air vesicles of less than one-quarter micron in size are probably exhaled at once and thus do not produce silicosis. Dr. R. R. Sayers, U. S. Public Health Service, says that the greatest amount of damage is done by the particles from 1 to 3 microns. The rate of development of the disease depends on free silica of less than 10 microns in size found in the dust. Doctor Lanza, of the Metropolitan Life Insurance Co., states that it is the chemical reaction following the inhalation of dust and not the mechanical reaction that causes the disease. Tuberculosis and pneumonia are the usual complications that cause death. Only one man is known to have died of uncomplicated silicosis.

"Unfortunately, silicosis cannot be detected in the incipient stage by routine medical examination. It can only be determined definitely after some damage, more or less permanent, has been done to the lungs. It is, therefore, of the utmost importance that we protect workmen against the ravishes of silicosis by providing them with equipment which is certain to prevent the smaller and most dangerous particles of silica from being breathed."

PROBLEMS FROM READERS

Edited by T. F. Smiley

Might Be Better to Install Gas-Lift Than a Central Power System

Where can I find information relating to the best engineering practice in the construction of power and rod-line systems and the setting of pumping jacks in this shallow oil-sand area?—T. M. G.

The leading manufacturers of this type of equipment have well-organized engineering departments, and their engineers are thoroughly familiar with actual field practice. It is doubtful whether you can obtain more intelligent or more trustworthy counsel than you can from these men. It might be said of them that they first of all are engineers, and only secondarily salesmen.

The subject of central power systems for pumping is treated at length in the 1924 edition of L. C. Uren's "Petroleum Production Engineering." It is understood a new edition of this work, incorporating improved methods developed in late years, is to be issued before long.

Have you considered applying gas-lift to your wells? While you have shallow production, it might be that you could install gas-lift now and later employ pneumatic cylinders provided with compressed air, using the same system of piping put in for the gas lift. Such a system would be more flexible than a central power plant and it also might permit repressuring the sand, still using the same general system of piping.

Problems Created by Heaving Shale Are Not Completely Answered

We have had a great deal of trouble in this district with heaving shale. Our troubles have included sticking of the drill pipe and losing the hole, with the necessity of sidetracking. I would be glad to get any suggestions you can give me as to any new methods of handling this shale problem. Perhaps you can tell me what other drillers have done.—L. T. A.

No complete solution of the problem created by heaving shale seems to be in sight at the present time, though progress is being made and it is quite within the probabilities that in the course of time the worst features of this hazard, which appear not only in drilling but in setting the casing string, will be overcome. More than usual success was achieved by the Pure Oil Co. in getting through approximately 2,000 feet of bad shale in the Louise Field of Wharton County, Tex. In this test well the hole heaved, or bridged, several times, and sticking drill pipe caused trouble. Other difficulties arose, but the fact that the drillers eventually got through points to the probability that shale will be conquered in the course of time.

Unique in the method of combating the shale in this well was the use of synthetic drilling muds, all native mud and cuttings being discarded. Of particular note in connection with this synthetic fluid was the high concentration of bentonite, this running as much as 40 per cent. Previously it had been considered necessary to minimize the bentonite because of its tendency to make the fluid too viscous. In this case the bentonite was used in large proportion to eliminate the possibility of free water in the fluid, and in turn chemicals were used to control the viscosity.

Extensive facilities with an elaborate layout of traps and pits were provided to handle and condition the drilling fluid and insure that the desired properties and characteristics of the mud were maintained. That no water would get into the fluid as a result of rains, the entire mud system, including all pits, was covered with a corrugated iron roof. This was a precaution not usually taken but indicates the extent to which operators are determined to go to develop methods and equipment to enable them to combat the shale successfully.

In the mud system returns from the well were discharged into a short wooden ditch emptied over a shale shaker, in which operation a large part of the native cuttings, including sand and shale, were separated and jetted to a refuse pit.

The fluid which is not segregated was flowed in succession through three small mud boxes, or traps, where further settling of undesirable properties and mud took place. A line from the bottom of each of these permitted the jetting of the settlings to the refuse pits. From the last of these boxes, the fluid flowed to a large accumulation pit and thence into the final pit which fed the pumps. At times a mud cracking machine also was used for desanding and mixing mud.

The foregoing offers only a general picture of the devices to which this one company resorted to fight shale. Space does not permit details.

Readers are invited to send questions relating to drilling, producing and transporting operations. These questions will be placed in the hands of persons capable of answering them authoritatively. The names of those writing for information will be considered confidential, initials only being published. This department cannot undertake to answer questions involving patents or intricate formulas or those which properly should be submitted to consulting engineers or geologists.

WHY THEY CALLED IT *Fossil*

Fossil remains enable the paleontologist to fix the relative ages of geological formations. Digging in the fossil beds of South Dakota, R. A. Stirton, paleontologist at the University of California, unearthed skeletons which he believes to be of prehistoric hogs as large as a rhinoceros. Other skeletons indicate horses at that time were about the size of a deer. Seventeen skulls of primitive animals were found. The horses represent a more ancient type than the commonly known three-toed horse. The lower jawbones of a "bear-dog," comparable in size to the jawbones of the big bears of Alaska today, and a mastodon skull 4 feet long were among other fossils discovered. The word "fossil" is from the Latin "fossilis."

Using Directional Well to Subdue Crater Fires in the Oil Fields

May I ask from your department an explanation of a method of extinguishing fires in burning wells through the drilling of what are called relief wells. I believe from what little I know about this method that the so-called relief well is drilled close to the burning well and if you can tell me a little more exactly what course is followed I would be very much obliged.—T. R. M.

No better way of explaining fire extinction by use of relief wells comes to mind than to tell the course actually followed in a particular instance. The Sinclair Prairie Oil Co.'s burning crater well in the Seeligson Field, Southwest Texas, after running wild for about 10 weeks, was killed early this year by drilling a relief well. The No. 1 Seeligson ceased its flow and the fire went out two hours after the crew began to pump water into the producing sand through the No. 1-A Seeligson (the relief well), drilled directionally so the bottom of the hole was within a few feet of the wild well.

Pumping was started at 3 o'clock one afternoon with two pumps compounded. Circulation was established in three minutes when pressure was built up to 1,200 pounds. One pump then was cut out and the remaining pump maintained circulation, injecting water at the rate of 100 bbls. per hour. The burning well soon began to subside and at 5:10 o'clock the flames died out and the well was quiet.

It was calculated that the bottom of the relief well was within 5 feet of the hole of the No. 1. Surface location was 386 feet south 35° 44′ east of the center of the crater. Considering the comparatively shallow depth of the sand and consequent short drilling distance for the deflection the marksmanship was regarded as an achievement. Measured depth of the relief well was 2,405 feet, which placed the bottom of the hole in the sand at a calculated true vertical depth of 2,361.36 feet.

Drilling of the relief well was done with Sinclair Prairie crews under the direct supervision of whipstocking and well surveying specialists. Bits, whipstocks and hole surveying cameras were used.

The Sinclair well was the second in this country killed by drilling a relief well with deflected hole. The first was the Harrison & Abercrombie crater producer at Conroe.

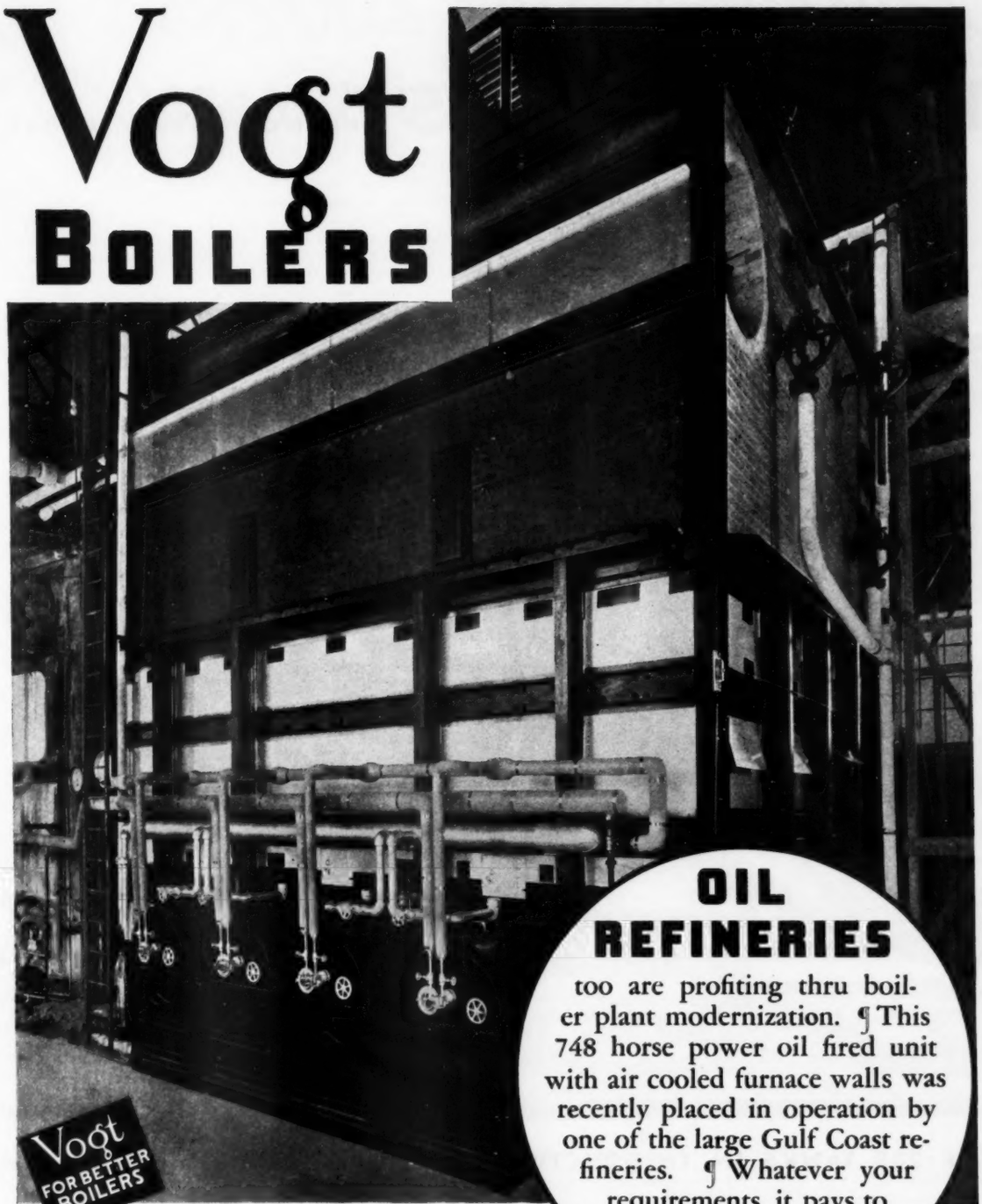
Hazards involved in the drilling of the Conroe relief well perhaps were greater because the wild well with a crater 200 feet across was not burning and the oil production of 6,000 bbls. daily, was being collected in open traps and reservoirs covering an area of 15 acres, ignition of which would have resulted in a tremendous fire. But the shallower depth of the Seeligson well and the necessity for sharp deflection of the hole in the relief well made this project harder in some aspects.

The Seeligson well was drilled vertically 400 feet where surface casing was cemented. This left less than 2,000 feet for deflecting the hole to the sand at a point near the crater well 386 feet away at the surface. The average angle of deflection in this well was 11° 30′ but at times the angle was as great as 16° 30′. In the last 1,000 feet it was estimated the average angle was 15°.

Sixteen whipstocks were used. Of interest in connection with the acute angles of deflection is that casing was run into the hole without trouble.

After surface casing had been run and cemented in the 400-foot vertical hole, surface plug was drilled out and deflection was started. This hole was drilled with 9⅞-inch bit to 2,215 feet and then was reamed to 14 inches, and 9⅝-inch casing was run and cemented on bottom. Cement was drilled out and the hole then was drilled to its objective, upon which the pumping of water was started.

Vogt BOILERS



OIL REFINERIES

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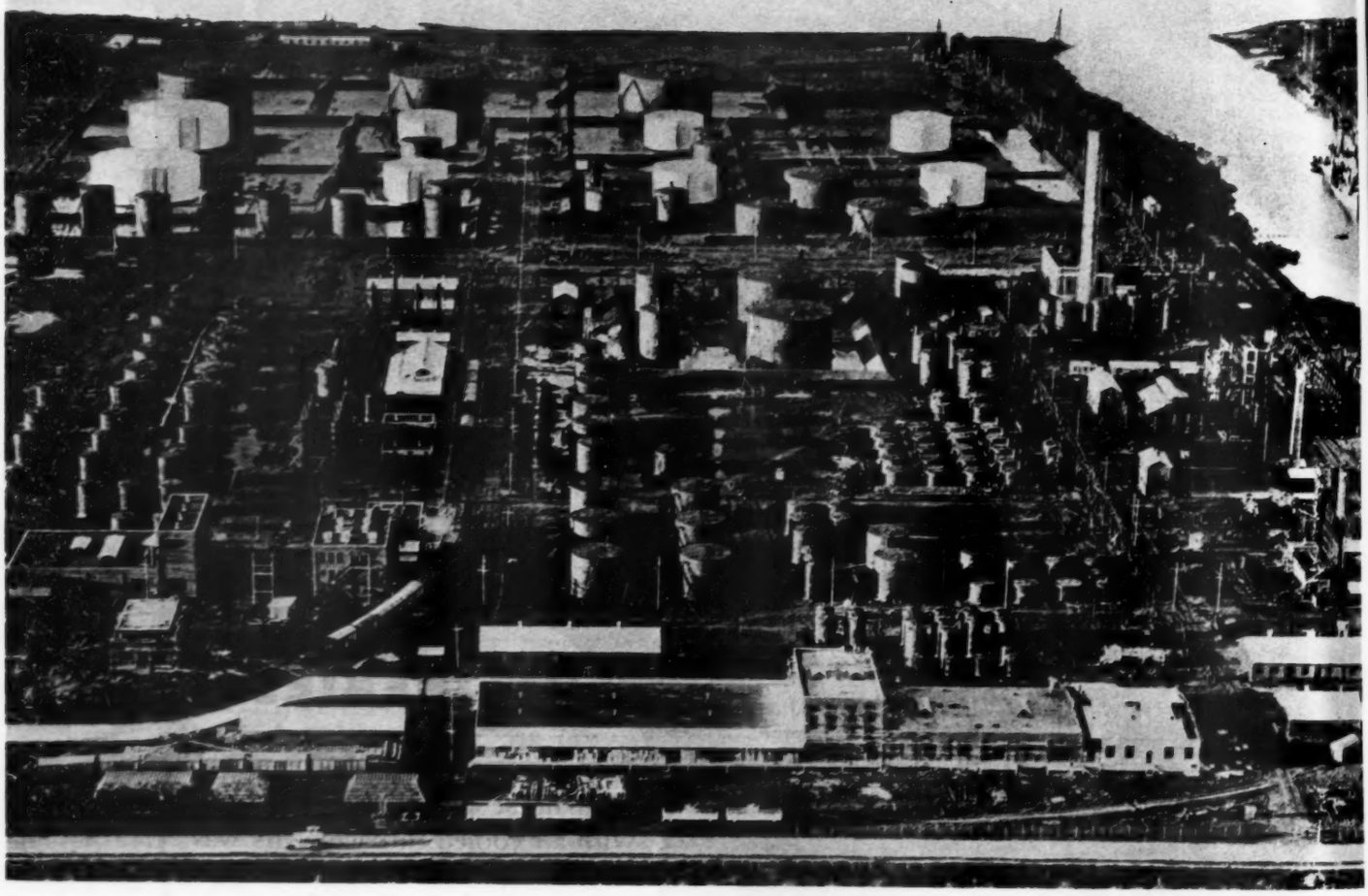

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East and East Central Texas

By
L. E. BREDBERG

CAYUGA TRINITY SAND TEST MAY PROVE ONLY GAS WELL

DALLAS, Tex., Aug. 19.—Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 21-A Wills, closely watched Trinity sand test in the Cayuga Field, northwest Anderson County, has so far proved a failure from this deep formation. Bottom of the hole is 8,867 feet. The company is planning to carry it deeper, salt water having dampened the possibilities of making a producer at its present depth. Casing had been cemented at 8,750 feet after a heavy gas pressure had been recorded, and it appeared sure of making at least a gasser from the deep sand, but the casing apparently cut off the gas horizon. If deeper drilling fails to bring an oil or gas producer it will be plugged back and the casing perforated at the point gas was struck and a gas well will be produced. Gas from this zone would give an additional potential supply for Lone Star Gas Co.'s 20-inch trunk line out of the field to Dallas. This line is now under construction, contracting companies working north and south out of Kerens, one in the direction of Dallas and the other towards the Cayuga and Long Lake Fields.

Camp Hill

Gulf Production Co. completed another sub-Clarksville producer in the Camp Hill Pool, eastern Anderson County, this week. No. 3-A Southern Pine Lumber Co., in the Rosson Survey, made 85 bbls. in 4 hours and 45 minutes through a one-quarter inch choke at total depth of 5,095 feet. Elevation is 598 feet. The company's No. 2-A Southern Pine Lumber Co., on the same lease, same survey, will make a Woodbine sand test at total depth of 5,236 feet. It is swabbing 80 bbls. per day and will be put on the pump. The Gulf wells force Sun Oil Co. to drill three east offsets on its W. T. Davis tract in the Rosson Survey. These will be the first outside company tests in field.

Wildcat Locations

J. M. Burnham and others are shut down at 40 feet on a new test on the Norton Properties in the W. M. Johnson Survey, 8 miles southwest of Zavala in Angelina County.

Bell and Hays are ready to spud in the Chilton area in Falls County, on the H. Taylor farm in the J. A. Manchaca Survey.

Stewart and Watson of Fairfield have staked location on the S. A. Burleson lands (Ball) in the J. Y. Aguilera Survey, in the Red Lake area where Daniels Oil & Royalty Co. has two gassers.

Roeser and Pendleton, Inc.'s No. 1 Litchfield, in Henderson County, is just north of Worsham's No. 3 Wathen, extension well to the northern extension area of the Cayuga Field, Anderson County. No. 3 Wathen gave Henderson County its first production, which may be extended for a considerable distance into the county.

Rosser Brothers and H. J. Jackson have staked a wildcat location on the William Maltby lands in the Pedro J. Esparza Survey, 5 miles south of Nacogdoches County.

Long Lake Field

Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 1 Burkitt, in the Simon Sanchez Survey No. 7, east of Long Lake production, and over in Leon County, drilled into salt water sand at 5,280 feet and to total depth of 5,309 feet before shutting down. Five-inch casing is to be cemented to the total depth. This will be plugged back and the casing perforated to complete as a gas well.

Wildcat Completions

O'Connor and St. Germain Oil Co.'s No. 1 L. S. Long, in Block 13, T. Quevado Survey, 2 miles south of Mount Selman, in Cherokee County, has been abandoned at a total depth of 4,956 feet. Elevation is 668 feet. It logged Pecan Gap chalk from 3,605-4,025 feet and Austin chalk from 4,550-4,744 feet. Top of the Woodbine sand was logged at 4,832-40 feet. It was plugged back to 4,839 feet and a drill stem test made before abandoning.

Hinchcliffe and others' No. 1 Longbotham in the R. B. Longbotham Survey, a couple of locations northwest of the old Dickey well, in Freestone County, was abandoned at a total depth of 3,200 feet. Hoover and others abandoned location at a total depth of 3,200 feet. Hoover and others abandoned location on the McFall farm in the S. Garrison Survey, 4 miles northeast of Mexia.

J. P. McKinney and others' No. 1 N. D. Boyd, in the Sarah McAnulty Survey, one location northeast of Magnolia Petroleum Co.'s No. 36 Boyd, was abandoned at a total depth of 1,533 feet.

Navarro County had another abandonment in W. J. Keeling's No. 1 Rushing in the Henry Ford Survey, 6 miles southwest of Richland. Total depth is 2,895 feet and elevation is 530 feet.

EAST TEXAS FIELD

There were 57 locations staked in the East Texas Field this week and 70 completions. Four were pumpers, four were swabbers and one dry hole was chalked up for Gregg County.

EAST TEXAS COMPLETIONS

Anderson—Camp Hill Pool

Gulf Production Co.'s No. 3-A Southern Pine Lumber Co., total depth 5,095 feet in sub-Clarksville, elevation 598 feet, initial production 85 bbls. in four hours and 45 minutes through one-quarter inch choke.

Cherokee County

O'Connor and St. Germain Oil Co.'s No. 1 Long, dry and abandoned 4,956 feet, 2 miles south of Mount Selman.

Limestone County

J. P. McKinney and others' No. 1 Boyd, dry and abandoned 1,533 feet.

Cayuga Field

Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 11 Ware, total depth 4,094 feet, initial production 117 bbls. in 24 hours through one-eighth inch choke.

Freestone County

Hinchcliffe and others' No. 1 Longbotham, dry and abandoned 3,200 feet. Hoover and others' No. 1 McFall, location abandoned.

Navarro County

W. J. Keeling's No. 1 Rushing, dry and abandoned 2,895 feet, elevation 530 feet, 6 miles southwest of Richland.

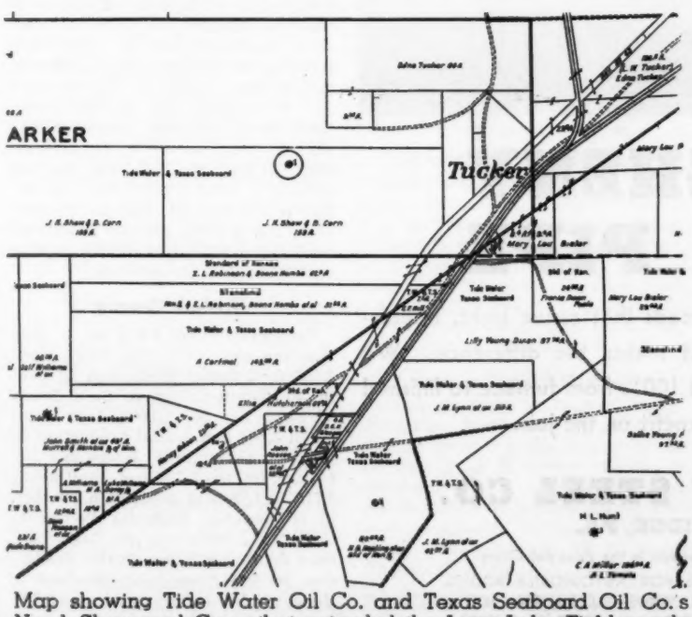
Gregg County

Amerada Petroleum Corp.'s No. 13 Burnside, top pay 3,535 feet, total depth 3,565 feet, initial production 15 bbls. in 15 minutes; Arkansas Fuel Oil Co.'s No. 12-A Lathrop, top pay 3,583 feet, total depth 3,608 feet, initial production 23 bbls. in 20 minutes through three-quarter inch choke. Atlantic Oil Producing Co.'s No. 6 McGeorge, top pay 3,495 feet, total depth 3,542 feet, initial production 120 bbls. per hour; No. 20 Porter, top pay 3,617 feet, total depth 3,642 feet, initial production 118 bbls. per hour.

Dyck Oil Co.'s No. 10 Christian, top pay 3,564 feet, total depth 3,600 feet, initial production 17 bbls. in 15 minutes. Gulf Production Co.'s No. 15 Snider, top pay 3,500 feet, total depth 3,526 feet, initial production 60 bbls. per hour. Humble Oil & Refining Co.'s No. 10 Castleberry, top pay 3,431 feet, total depth 3,468 feet, initial production 67 bbls. per hour; No. 14-A Johnson, top pay 3,629 feet, total depth 3,632 feet, initial production 60 bbls. per hour; No. 11 Mackey top pay 3,646 feet, total depth 3,651 feet, initial production 36 bbls. per hour.

Humphrey's No. 8 Thomas, top pay 3,616 feet, total depth 3,633 feet, initial production 40 bbls. per hour; No. 9 Thomas, dry and abandoned 3,696 feet. Selby Oil & Gas Co.'s No. 14-A Snavely, top pay 3,595 feet, total depth 3,597 feet, initial production 30 bbls. in 30 minutes. Shell Petroleum Corp.'s No. 19 Burnside, top pay 3,509 feet, total depth 3,529 feet, initial production 25 bbls. in 30 minutes; No. 28 Moore, top pay 3,544 feet, total depth 3,566 feet, initial production 35 bbls. in 30 minutes.

Sinclair Prairie Oil Co.'s No. 49 Moncrief, top pay 3,556 feet, total depth 3,600 feet, initial production 38 bbls. in 15 minutes. Superior Oil Co.'s No. 16-A Pritchard, top pay 3,522 feet, total depth 3,559 feet, initial production 130 bbls. per hour. Stanolind Oil & Gas Co.'s No. 10 Orms, top pay 3,519 feet, total depth 3,581 feet, initial production 26 bbls. in 30 minutes; No. 8 Stephens, top pay 3,564 feet, total depth 3,656 feet, initial production 28 bbls. in 15 minutes. Carter's No. 2 Foltz, top pay 3,535 feet, total depth 3,590 feet, ini-



Map showing Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 1 Shaw and Cern, that extended the Long Lake Field, southwest Anderson County, 1 mile north, an oil well instead of gas

tial production 40 bbls. in 30 minutes.

Lyons' No. 3 Richards, top pay 3,517 feet, total depth 3,575 feet, initial production 75 bbls. in 24 hours, pumping; No. 4 Richards, top pay 3,519 feet, total depth 3,561 feet, initial production 40 bbls. in 24 hours, swabbing. Quad Corp.'s No. 8-A Duncan, top pay 3,665 feet, total depth 3,672 feet, initial production 80 bbls. per hour. Shell Petroleum Corp.'s No. 26 Elder, top pay 3,558 feet, total depth 3,578 feet, initial production 40 bbls. in 30 minutes; No. 9 Knowles, top pay 3,638 feet, total depth 3,644 feet, initial production 30 bbls. in 30 minutes.

Shiloh Oil Co.'s No. 2 Lockhart, top pay 3,667 feet, total depth 3,668 feet, initial production 30 bbls. in 15 minutes. Southport Petroleum Co.'s No. 3 School Lot, top pay 3,590 feet, total depth 3,615 feet, initial production 35 bbls. in 30 minutes. Sun Oil Co.'s No. 13 Reese, top pay 3,653 feet, total depth 3,667 feet, initial production 30 bbls. in 30 minutes. Thurman & Lipscomb's No. 3 Martin, top pay 3,636 feet, total depth 3,640 feet, initial production 50 bbls. in 30 minutes.

Rusk County

Beren's No. 2 Britton, top pay 3,600 feet, total depth 3,645 feet, initial production 15 bbls. per hour. Burwyn Oil Co.'s No. 5 Florey, top pay 3,670 feet, total depth 3,672 feet, initial production 65 bbls. in two hours. Constantine's No. 4 Tucker, top pay 3,645 feet, total depth 3,646 feet, initial production 40 bbls. per hour. Groneman's No. 3 Mayfield, top pay 3,592 feet, total depth 3,640 feet, initial production 20 bbls per. hour, swabbing. Humble Oil & Refining Co.'s No. 12-A Sexton, top pay 3,726 feet, total depth 3,761 feet, initial production 85 bbls. per hour.

Woodley Petroleum Corp.'s No. 9-A Ladd, top pay 3,604 feet, total depth 3,615 feet, initial production 60 bbls. per hour. Arkansas Fuel Oil Co.'s No. 11 Wheelis, top pay 3,679 feet, total depth 3,700 feet, initial production 22 bbls. in 15 minutes. British-American Oil Co.'s No. 6 Mayfield Co., top pay 3,627 feet, total depth 3,639 feet, initial production 90 bbls. per hour. Hammond Oil Co.'s No. 1 Holt, top pay 3,511 feet, total depth 3,540 feet, initial production 20 bbls. in two hours, pumping. Humble Oil & Refining Co.'s No. 19 Box, top pay 3,750 feet, total depth 3,792 feet, initial production 70 bbls. per hour. Jones' No. 3 Frederick, top pay 3,523 feet, total depth 3,556 feet, initial production 20 bbls. per hour.

Mabee Consolidated's No. 3-B Maxwell, top pay 3,558 feet, total depth 3,606 feet, initial production 20 bbls. per hour, pumping. Mallernee and Bullock's No. 5 Alford, top pay 3,630 feet, total depth 3,693 feet, initial production 45 bbls. per hour; No. 6 Alford, top pay 3,638 feet, total depth 3,691 feet, initial production 41 bbls. per hour. Marathon Oil Co.'s No. 27 Moore, top pay 3,638 feet, total depth 3,702 feet, initial production 60 bbls. per hour; No. 31 Moore, top pay 3,703 feet, total depth 3,735 feet, initial production 44 bbls. per hour. Moss & Urschel's No. 6 Deason, top pay 3,664 feet, total depth 3,735 feet, initial production 100 bbls. in two hours.

H.B.W. Oil Co.'s No. 7 Stroud, top pay 3,507 feet, total depth 3,570 feet, initial production 10 bbls. per hour, swabbing. Petroleum Marketing Co.'s No. 3 Frederick Estate, top pay 3,557 feet, total depth 3,630 feet, initial production 41 bbls. in two hours, pumping. E. L. Smith Oil Co.'s No. 2 Wooley, top pay 3,554 feet, total depth 3,621 feet, initial production 20 bbls. in two hours, swabbing. Vaughn Production Co.'s No. 7 Reagan, top pay 3,761 feet, total depth 3,805 feet, initial production 75 bbls. per hour.

Smith County

British-American Oil Co.'s No. 8 Thompson, top pay 3,644 feet, total depth 3,657 feet, initial production 85 bbls. per hour. Illinois Oil Co.'s No. 45 Mayfield, top pay 3,817 feet, total depth 3,818 feet, initial production 120 bbls. in two hours. Johnson & Owens' No. 4 Wolford, top pay 3,730 feet, total depth 3,731 feet, initial production 18 bbls. in 15 minutes. McMurray's No. 7 Roberson, top pay 3,811 feet, total depth 3,812 feet, initial production 15 bbls. in 10 minutes.

Salmon & Carter's No. 1 Wright, top pay 3,704 feet, total depth 3,706 feet, initial production 30 bbls. in 30 minutes. Sinclair Prairie Oil Co.'s No. 56-A Mayfield, top pay 3,816 feet, total depth 3,818 feet, initial production 55 bbls. per hour. Sun Oil Co.'s No. 10-A Ritch, top pay 3,671 feet, total depth 3,672 feet, initial production 60 bbls. per hour. Texas-Canadian Oil Co.'s No. 8-C Irion, top pay 3,750 feet, total depth 3,751 feet, initial production 20 bbls. in 20 minutes; No. 2 Pace, top pay 3,773 feet, total depth 3,774 feet, initial production 20 bbls. in 20 minutes.

Upshur County

Conservative Oil Co.'s No. 3 Phillips, top pay 3,701 feet, total depth 3,703 feet, initial production 20 bbls. in 30 minutes. Day & Co.'s No. 2 Victory, top pay 3,603 feet, total depth 3,604 feet, initial production 20 bbls. in 15 minutes. Johnston's No. 1-B fee, top pay 3,702 feet, total depth 3,715 feet, initial production 60 bbls. in 30 minutes. Magnolia Petroleum Co.'s No. 2 Bell, top pay 3,663 feet, total depth 3,665 feet, initial production 80 bbls. per hour. Sanford & Meadow's No. 4 Morgan, top pay 3,760 feet, total depth 3,782 feet, initial production 18 bbls. in 18 minutes. Shano Oil Co.'s No. 10 Doby, top pay 3,755 feet, total depth 3,764 feet, initial production 70 bbls. per hour. Sklar Oil Co.'s No. 2 Phillips, top pay 3,613 feet, total depth 3,618 feet, initial production 29 bbls. in 30 minutes.

Rocky Mountain Runs

Production estimates for week ended August 17, 1935:

WYOMING	
Salt Creek	16,660
Big Muddy	1,550
Badger Basin	30
Black Mountain	290
Byron	190
Dallas Derby	530
Dutton Creek	80
Elk Basin	650
Ferris	20
Frannie	800
Garland	1,100
Grass Creek	2,650
Greybull	10
Hamilton Dome	1,590
Hudson	270
LaBarge	1,170
Lance Creek	1,590
Lost Soldier	930
Mule Creek	Shut in
Midway	80
Notches	Shut in
Oregon Basin	3,210
Osage	820
Pilot Butte	20
Rex Lake	Shut in
Rock River	1,530
South Casper	500
Poison Spider	250
Teapot	20
Total Wyoming	36,540
MONTANA	
Buckley-Border	240
Cat Creek	870
Cut Bank	5,200
Dry Creek	270
Kevin-Sunburst	3,400
Lake Basin	50
Pondera	1,240
Total Montana	11,270
COLORADO	
Florence	100
Fort Collins and Wellington	380
Iles Dome	2,900
Moffatt	510
Orchard	70
Rangely	80
Tow Creek	160
Total Colorado	4,200
NEW MEXICO	
Artesia	440
Cooper area	6,170
Eunice area	8,000
Hobbs	31,020
Hogback	200
Hospah	Shut in
Jal	4,340
Lea area	1,340
Maljamar	1,470
Rattlesnake	710
Table Mesa	90
Total New Mexico	53,780
Total Rocky Mountain region	105,790

Crude Oil Stocks

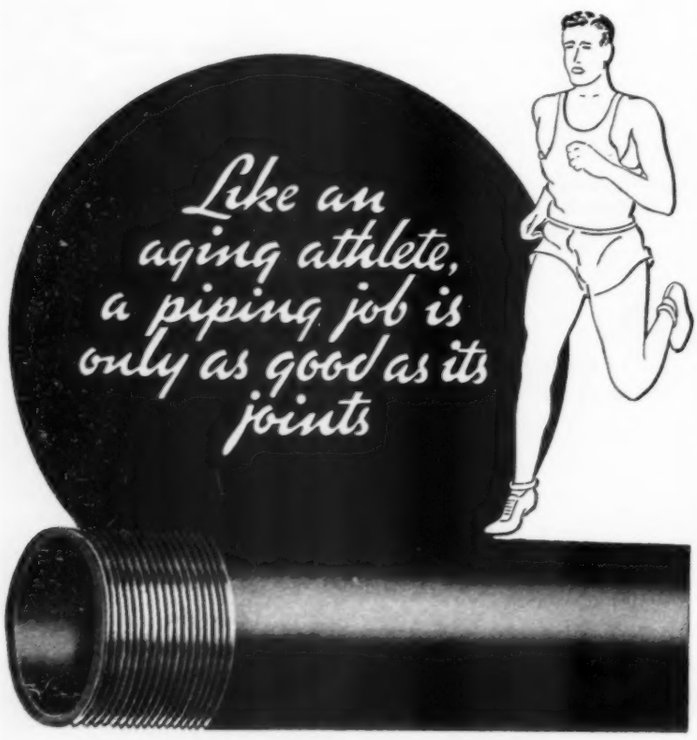
Stocks of domestic and foreign crude petroleum for the week ended July 27 totaled 314,335,000 bbls.

Imports increased from an average of 65,000 bbls. daily to 95,000 bbls. Crude runs to stills continued to increase, the daily average for the week ended July 27 being about 2,850,000 bbls. The daily average indicated demand for crude oil for the week was 3,172,000 bbls.; the daily average demand for July was considerably in excess of 3,000,000 bbls.

STOCKS OF CRUDE PETROLEUM

Grade of crude oil—	July. 27
Pennsylvania Grade	4,861,000
Other Appalachian	945,000
Lima-NE Indiana-Mich.	1,351,000
Illinois-SW Indiana	11,576,000
N. Louisiana and Ark.	10,530,000
W. Texas and SE N. Mex.	30,903,000
East Texas	27,581,000
Other Mid-Continent	141,813,000
Gulf Coast	24,238,000
Rocky Mountain	27,435,000
California	29,772,000
Domestic crude	311,005,000
Foreign crude	3,330,000
Total*	314,335,000

*Represents approximately 98 per cent of total stocks in the United States, exclusive of producers' stocks.



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West and North Texas

NEW RECORD IN LOCATIONS MADE IN WEST TEXAS AREA

By L. E. BREDBERG

FORT WORTH, Tex., Aug. 19.—There were 27 locations staked in the West Texas district during the week, six under last week, which was a record "high" or peak for the past six years. New fields and extensions are causing more drilling, but wildcatting continues unabated with companies testing long held blocks or farming them out to independent operators for a test before they relinquish the acreage.

Sun Oil Co., one of the few companies to refrain from wildcatting in the district during the past few years, has staked location about 2 miles north of Dobbs Oil Co.'s No. 1 Friend discovery, south of the town of Big Lake in Reagan County. It is on the Lulu Wilson Young farm, in Section 1, G.C.&S.F. Survey, Abstract 17, about 2½ miles north of the Friend discovery, and the same distance south of Big Lake. Ajax Drilling Co. of Dallas will drill the test.

The same company has also staked location on its 10-section block in southern Ector County, on the W. P. Edwards ranch in Section 20, Block 43, Township 3s, T.&P. Survey. It is east of the Penn Field and several miles northeast of the Waddell Pool in northern Crane County.

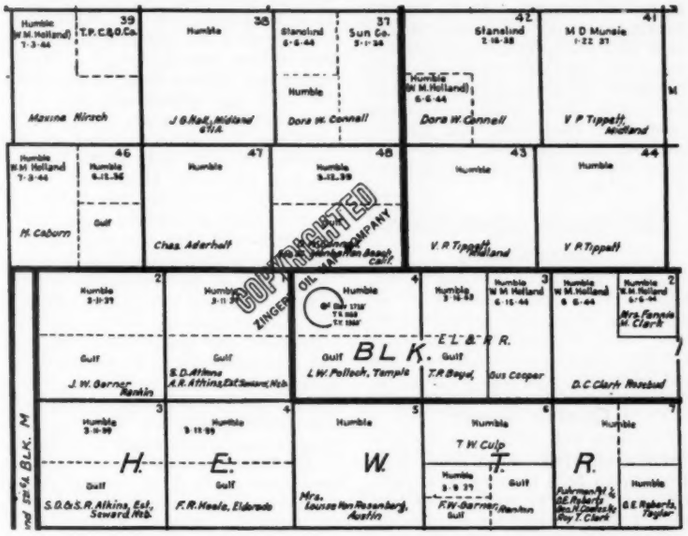
Northeastern Winkler County is to have another wildcat, in Section 8, Block A-56, by Mascho Oil Co., which is also drilling in Section 46, Block 73, 9 miles east of the latest announced test.

Reagan County is to get another wildcat immediately, in Section 1,231, G.C.&S.F. Survey, 4 miles southeast of Centralia and 10 miles northeast of the Big Lake Field. Plymouth Oil Co. is to drill this Permian test on the Belcher ranch.

Keystone Area

Seven of the nine wildcats drilled on Gulf Production Co.'s Keystone block, northeast of Kermit in Winkler County, have been proved to production, with only two having been shot, and possibilities for the remaining two are good for making producers. Nos. 7, 8 and 9 Keystone Cattle Co. remain to be completed. No. 7 is bottomed at 3,652 feet and is to commence bailing for test. No. 8 has been drilled to 3,887 feet, the deepest of the nine tests, and is to start swabbing. No. 9 is bottomed at 3,656 feet and was to start swabbing today. No. 8 is in Section 13, 1 mile east of No. 2, the second well on the block, and No. 9 is 1 mile east and south of No. 2, and these are not so favorably located as the other seven tests on the block, and may prove disappointments, in which event they will limit the field on the southeast.

Slosi Oil Co.'s No. 1 Lovett, in Section 36, Block 26, P.S.L. Survey, just west of the town of Kermit and between the Howe and Brown and Altman producing areas and on the Howe-Halley trend in Winkler County, is now looking as a producer after cleaning up fishing jobs and overcoming blowouts which have given several months' trouble. Rotary tools were installed and the well was killed and drilled to 2,863 feet, where it is spraying 100 bbls. per day. An increase in oil was struck at 2,620-25 feet, 2,632-38 feet, an increase in gas was struck at 2,725-27 feet, and when cement plug was drilled at 2,738 feet it blew out the second time. It will probably be completed at present depth. It is 3 miles south of production in the Howe area and 2½ miles north and a little west of production on the Brown and Altman ranch and lends greater possibilities of these two areas being linked by production.



Map showing interesting Ordovician test drilling by Humble Oil & Refining Co. on the Pollock ranch in Upton County. The test is now near the 9,000-foot mark. It is northeast of a line between the Ordovician producers in the Big Lake Field, Reagan County, to the southeast, and Gulf Production Co.'s world record depth well on the western line of Upton County

Ector County Outpost

Sun Oil Co. and Atlantic Oil Producing Co.'s No. 1 Holt, in Section 5, Block 43, Township 1n, T.&P. Survey, near the Andrews County line in northern Ector County, is shut down waiting orders as to acidizing. Bottom of the hole is 4,300 feet in lime and it is flowing from 20 to 30 bbls. per day. This well marks a 2½-mile northwest extension to the Cowden area, proving at least 1,500 more acres to that field.

Goldsmith Area

Phillips Petroleum Co. and Pure Oil Co.'s No. 2 Cowden, 1½-mile southern extension to the Goldsmith area, Ector County, has proved a better well since deepening to 4,160 feet. It flowed 266 bbls. in four hours making 100 bbls. during the first hour, and showing 2,200,000 feet of gas with the oil. It is about 200 feet higher than the Gulf-Goldsmith discovery. The two companies' No. 1 Cowden, 1½ miles to the north, in Section 14, Block 44, Township 1s, T.&P. Survey, is shut down at 4,171 feet as incomplete.

Paul Teas is moving in material for No. 1 Allison, Section 49, Block A, G.W.T.&P. Survey, in northeastern Sutton County.

Mitchell County Wildcat

Sawtelle and others' No. 1 Morrison, in Section 34, Block 29, Township 1n, T.&P. Survey, Mitchell County, several miles north of production, is appearing as if it would make a wildcat strike since showing 2,000 feet of oil in the hole following a 500-quart shot from 2,665-2,810 feet. Total depth is 2,810 feet.

Fisher County Outpost

Southern Oil Corp.'s No. 1 Williams-Pure, Section 203, Block 1, B.B. B.&C. Survey, a north outpost to the Royston Pool in Fisher County, is swabbing at the rate of 300 bbls. per day after its second 1,000-gallon acid treatment. An east offset is being drilled by the E. L. Smith Oil Co. of Mexia.

RANGER AND WICHITA FALLS

There were 43 tests completed in the Wichita Falls district during the week, 31 producers. Production average 60,495 bbls. per day.

The Samuel S. Alexander test on the Whitney farm in Section 4, H.T. &B. Survey, about 1½ miles east of the Loggie gas field, in the northwestern part of Stephens County, struck gas in sand at 426 feet and is drilling at 440 feet making an estimated 4,000,000 feet of gas. The sand was logged higher than in the Loggie Field, which makes the test much more interesting. This test is to go to the Ibex sand around 3,400 feet, thence to the Breckenridge lime at the 3,900-foot level and may be drilled to the Ellenburger lime of the Ordovician.

L. T. Burns' No. 1 Weinzapfel, northwest of Windthorst in Archer County, has proved a failure after striking the sand from 1,918-35 feet. Total depth is 3,002 feet. It is in Lot 99, Clark and Plumb Subdivision, Block 4, and the striking of the Canyon and the showing opened a considerable lease play in the area with the staking of other locations on adjacent acreage. Mr. Burns has made location for No. 1 Mobitzer in Block 38, Clark and Plumb Subdivision No. 3, 3 miles north of the wildcat failure. Golding and Cochran are moving on the J. Zatz land in Lot 10, Block 4, on a 1,400-acre block adjoining Windthorst townsite on the north. A test is also to be drilled about 4 miles northwest of the Burns failure, by Grisham and Hedrick on the A. B. Edwards lands in Block 14, L. P. Hunt Subdivision of the G. Bruner Survey. This is to go to 2,800 feet. Burns' No. 2 Weinzapfel, 75 feet south of the first failure, also proved a failure in the sandy lime horizon picked up by the first test.

An extension to the Chalk Hill Pool in Archer County was not made by Magnolia Petroleum Co.'s No. 1 Luke McCrory in the William Walker Survey, Abstract 660, it is 1½ miles west of the Chalk Hill Pool, and missed production in three horizons and was abandoned at a total depth of 3,701 feet.

PANHANDLE DISTRICT

The Panhandle district recorded a peak in completed wells this week when 31 tests were reported. Only 12 locations were staked. All completed wells were given only one day proration tests according to the new ruling which displaced the five-day potential tests. Four of the western Wheeler County wells were reported large ones, the largest being Smith Brothers' No. 2 Sitter, which made 4,684 bbls. per day at a total depth of 2,567 feet. These operators completed No. 2-B Sitter for a 3,513-bbl. well at total depth of 2,578 feet. One other 4,095-bbl. well was brought in by Helena Oil & Gas Co. in No. 11

Keller. Total depth was 2,521 feet and the pay was topped at 2,450 feet.

New Plant for Wheeler County

The small widely separated Osborn-Woodley Pool in eastern Wheeler County has at last received an outlet for at least part of its oil. Mid-Petroleum Marketing Co., Inc., of Oklahoma City, has completed a 250-bbl. skimming plant on the Rock Island Railroad near the pool, and will process oil taken from the wells.

Carson County

Empire Gas & Fuel Co.'s No. 3 Fields, total depth 3,213 feet, initial production 564 bbls. Gulf Production Co.'s No. 9 Cooper, top pay 3,002 feet, total depth 3,056 feet, shot, initial production 465 bbls. per day, pumping. Magnolia Petroleum Co.'s No. 10 fee, top pay 3,070 feet, total depth 3,099 feet, initial production 408 bbls., pumping.

Gray County

Continental Oil Co.'s No. 12 Wright, top pay 2,891 feet, total depth 2,923 feet, initial production 730 bbls. on gas-lift. Dyck Oil Co.'s No. 2 Saunders, top pay 2,887 feet, total depth 2,937 feet, initial production 599 bbls., pumping. International Petroleum Co.'s No. 2 McConnell, top pay 3,200 feet, total depth 3,260 feet, initial production 360 bbls., pumping. Jeffries' No. 1 Baggerman, temporarily abandoned. King Royalty Co.'s No. 2 Volmert, top pay 3,230 feet, total depth 3,283 feet, shot, initial production 490 bbls., pumping. Magnolia Petroleum Co.'s No. 5 Heaston, top pay 3,169 feet, total depth 3,260 feet, shot, initial production 401 bbls. pumping. Pampa Production Co.'s No. 2 Harrah, top pay 3,170 feet, total depth 3,265 feet, shot, initial production 253 bbls., pumping. Phillips Petroleum Co.'s No. 1 Saunders, top pay 2,885 feet, total depth 2,918 feet, shot, initial production 395 bbls. per day, pumping. Plains Holding Co.'s No. 2 Chapman, top pay 2,598 feet, total depth 2,670 feet, initial production 693 bbls. per day, on gas-lift. Sun Oil Co.'s No. 3-B Combs-Worley, top pay 3,030 feet; plugged back to 2,980 feet; acidized, initial production 229 bbls. per day pumping.

Hutchinson County

Crosbie, Inc.'s No. 8 Pitts, top pay 2,867 feet, total depth 2,955 feet, initial production 409 bbls., pumping. Gulf Production Co.'s No. 52 Dial, top pay 2,915 feet, total depth 2,934 feet, initial production 68 bbls. of oil and 22 bbls. of water, pumping; No. 1 Pitcher, top pay 3,008 feet, total depth 3,173 feet, shot, initial production 324 bbls., pumping. International Petroleum Co.'s No. 17 Lewis-Badger, top pay 3,025 feet, total depth 3,045 feet, initial production 516 bbls., pumping; No. 12 Lewis-Badger, top pay 2,890 feet, total depth 2,980 feet, shot, initial production 418 bbls., pumping. Power Petroleum Co.'s No. 1 Hodges, top pay 2,986 feet, total depth 3,048 feet, initial production 92 bbls. of oil and 51 bbls. of water per day, pumping. Stanolind Oil & Gas Co.'s No. 6-C Ware, top pay 3,080 feet, total depth 3,142 feet, initial production 546 bbls., pumping. Stekoll Oil Producer's No. 10-G Whittenburg, top pay 2,905 feet, total depth 3,022 feet, initial production 539 bbls., pumping. U-Tex Oil Co.'s No. 3-A Ware, top pay 3,055 feet, total depth 3,151 feet, initial production 482 bbls. per day, pumping. Wasson, trustees' No. 6 Watkins, top pay 2,925 feet, total depth 3,015 feet, initial production 775 bbls., pumping.

Wheeler County

Dyck Oil Co.'s No. 3 Sitter, top pay 2,410 feet, total depth 2,507 feet, initial production 3,138 bbls. Helena Oil & Gas Co.'s No. 9 Keller, top pay 2,510 feet, total depth 2,542 feet, initial production 679 bbls.; No. 10 Keller, top pay 2,370 feet, total depth 2,490 feet, initial production 3,164 bbls.; No. 11 Keller, top pay 2,450 feet, total depth 2,521 feet, initial production 4,095 bbls. Marathon Oil Co.'s No. 4 Husselby, top pay 2,330 feet, total depth 2,463 feet, initial production 231 bbls., pumping. Skelly-Magnolia Petroleum Co.'s No. 1-C Perkins, top pay 2,532 feet, plugged back to 2,494 feet, initial production 102 bbls. per day, pumping. Smith Brothers' No. 2 Sitter, top pay 2,445 feet, total depth 2,567 feet, initial production 4,684 bbls.; No. 2-B Sitter, top pay 2,445 feet, total depth 2,578 feet, initial production 3,513 bbls. per day.

WEST TEXAS COMPLETIONS

Crane County

Gulf Production Co.'s No. 1 Henderson, total depth 3,523 feet, top pay 3,231 feet, initial production 896 bbls.; No. 10 Waddell, top pay 3,235 feet, total depth 3,525 feet, initial production 966 bbls. in 19 hours.

Crockett County

Stanolind Oil & Gas Co.'s No. 3 Powell, top pay 3,513 feet, total depth 2,553 feet, plugged back to 2,538 feet, initial production 239 bbls. oil, 127 bbls. water per day pumping.

Ector County

Marathon Oil Co.'s No. 2 University, top pay 3,519 feet, total depth 3,661 feet, shot 350 quarts from 3,511-3,661 feet, initial production 191 bbls.

Glasscock County

Sun Oil Co.'s No. 7 Phillips, top pay 2,109 feet, total depth 2,290 feet, initial production 486 bbls. pumping.

Howard County

Humble Oil & Refining Co.'s No. 12 Settles, total depth 2,350 feet, acidized, initial production 597 bbls. per day pumping.

Pecos County

Hix' No. 1 Fromme, abandoned location. Stanolind and Continental Oil Co.'s No. 6-C Tippett, dry and abandoned 775 feet.

Reeves County

Freels and others' No. 1 Greenman, dry and abandoned 3,985 feet, elevation 2,721 feet.

Upton County

Gulf Production Co.'s No. 16 Crier-McElroy, top pay 2,708 feet, total depth 2,881 feet, initial production 325 bbls.; No. 17 Crier-McElroy, top pay 2,777 feet, total depth 2,965 feet, shot, initial production 360 bbls. International Petroleum Co.'s No. 2-B McClintic, top pay 2,880 feet, total depth 3,026 feet, shot, initial production 293 bbls. pumping. Texas Pacific Coal & Oil Co.'s No. 6-C Lane, top pay 2,245 feet, total depth 2,408 feet, acidized, initial production 186 bbls. per day pumping.

Winkler County

Barnsdall Oil Co.'s No. 1 Brown and Altman, top pay 3,150 feet, total depth 3,218 feet, shot, initial production 77 bbls. per day pumping. Texas Pacific Coal & Oil Co.'s No. 3 Daugherty, top pay 2,768 feet, total depth 3,000 feet, shot, initial production 1,186 bbls.

Ward County

California Co.'s No. 11 Gordon, top pay 2,280 feet, total depth 2,537 feet, shot, initial production 1,263 bbls.; No. 12 Gordon, top pay 2,285 feet, total depth 2,541 feet, shot, initial production 653 bbls.

NORTH TEXAS COMPLETIONS

Archer County

Bonner Co. and Kelleher's No. 1 Belle Z. Lyles, total depth 1,751 feet, dry and abandoned. L. T. Burns' No. 11-A F. Albers, top pay 1,245 feet, total depth 1,266 feet, initial production 30 bbls. per day; No. 1 J. Weinzapfel and others, total depth 2,600 feet, dry and abandoned; No. 2 J. Weinzapfel and others, total depth 1,927 feet, dry and abandoned. F. P. Cullum's No. 36 Falls (Ellis lease), top pay 1,151 feet, total depth 1,167 feet, initial production 150 bbls. per day. Garson and Seigel's No. 2 D. Pace, top pay 1,314 feet, total depth 1,324 feet, initial production 19 bbls. of oil and 30 bbls. of water in 12 hours. Hardesty-Elliott and others' No. 10 F. Brezina and others, top pay 1,436 feet, total depth 1,439 feet, initial production 35 bbls. per day. C. E. Jones and others' No. 2 A. D. Britton, top pay 640 feet, total depth 646 feet, initial production 12 bbls. per day. Magnolia Petroleum Co.'s No. 1 L. W. McCrory, trustee (L. F. Wilson), total depth 3,701 feet, dry and abandoned. Perkins and Cullum's No. 191 Falls, top pay 1,132 feet, total depth 1,144 feet, initial production 60 bbls. per day; No. 194 Falls, total depth 1,188 feet, dry and abandoned. Petroleum Producers' No. 2 R. Griffith, top pay 1,241 feet, total depth 1,249 feet, initial production 30 bbls. per day. Rathke Oil Co.'s No. 3 L. F. Wilson estate, total depth 612 feet, dry and abandoned. Stuckey Oil & Gas Co.'s No. 4 Ward Brothers, top pay 944 feet, total depth 955 feet, initial production 30 bbls. per day, pumping. Texas Co.'s No. 1 H. Buerger, total depth 1,476 feet, dry and abandoned. Underwood and Campbell's No. 12-B R. Campbell, total depth 992 feet, plugged pack to 913 feet, top pay 893 feet, initial production 21 bbls. per day.

Baylor County

Consolidated and Petroleum Producers' No. 22-D W. H. Portwood, top pay 1,339 feet, total depth 1,366 feet, initial production 50 bbls. per hour, flowing and swabbing. Petroleum Producers' No. 2-H Portwood, top pay 1,337 feet, total depth 1,373 feet, plugged back to 1,368 feet, initial production 300 bbls. per day, swabbing; No. 3-H Portwood, top pay 1,337 feet, total depth 1,367 feet, initial production 324 bbls. per day.

Cooke County

Fain-McGaha Oil Corp.'s No. 5 A. A. Otto, top pay 795 feet, total depth 843 feet, initial production 10 bbls. per day. Harper and Knappenberger's No. 5 Nat Piott, top pay 741 feet, total depth 795 feet, initial production 19 bbls. of oil and 29 bbls. of water per day. Merrick Drilling Co., Inc.'s No. 2 J. Hess, top pay 805 feet, total depth 834 feet, initial production 100 bbls. per day. F. W. Merrick Drilling Co., Inc.'s No. 6 Knabe, top pay 787 feet, total depth 825 feet, initial production 10 bbls. per day. Mudge Oil Co.'s No. 1 R. W. Trew, top pay 1,115 feet, total depth 1,130 feet, initial production 20 bbls. per day. Texas Co.'s No. 3 Nat. L. Piott, top pay 669 feet, total depth 773 feet, initial production 35 bbls. per day.

Jack County

Bryson Oil & Gas Co.'s No. 1 McCune (old well deepened, old total depth 4,598 feet), new total depth 4,820 feet, plugged back to 4,652 feet, top pay 4,545 feet, initial production 1,000,000 feet of gas daily. B. T. Fitzhugh's No. 1 J. M. Martin, total depth 442 feet, dry and abandoned.

Montague County

Benson Brothers and McIntyre's No. 1 Williams Estate, total depth 1,861 feet, junked and abandoned. F. H. E. Oil Co.'s No. 1-B D. A. Lauderback, top pay 1,248 feet, total depth 1,258 feet, initial production 10 bbls. per day.

Wichita County

Bridwell Oil Co.'s No. 13 Allen and Kemp, top pay 1,011 feet, total depth 1,017 feet, initial production 15 bbls. per day. Kemrow and Bailey's No. 55 Burnett, top pay 952 feet, total depth 963 feet, initial production 1 bbl. per day. George Proctor's No. 20 W. B. Honaker, total depth 1,987 feet, dry and abandoned. H. L. Rugeley's No. 3 Waggoner Estate, top pay 1,096 feet, total depth 1,106 feet, initial production 103 bbls. per day.

Wilbarger County

McAlister Fuel Co.'s No. 14-T Waggoner Estate, top pay 1,883 feet, total depth 1,894 feet, initial production 75 bbls. per day.

Young County

Baker and others' No. 2 N. Donnell, top pay 3,314 feet, total depth 3,319 feet, initial production 130 bbls. per day. F. H. E. Oil Co. and others' No. 4-B Jeffery Estate, top pay 660 feet, total depth 669 feet, initial production 60 bbls. per day. N. D. Goldsmith's No. 7 Dunigan, top pay 933 feet, total depth 939½ feet, initial production 15 bbls. per day; No. 4 J. R. Wilson, top pay 936 feet, total depth 942 feet, initial production 15 bbls. per day. L. G. Hawkins and others' No. 5 J. M. Kirkland, top pay 661 feet, total depth 673 feet, initial production 16 bbls. per day. J. H. Kleiner's No. 5 J. Kirkland, top pay 703 feet, total depth 711 feet, plugged back to 709 feet, initial production 35 bbls. per day. W. F. Krause and others' No. 1 S. W. Haggard, total depth 670 feet, dry and abandoned. E. R. Perkins and others' No. 1 A. J. White, total depth 1,114 feet, dry and abandoned. E. R. Riggs' No. 1-C Larrimore (old well deepened, formerly produced from lime 588-97½ feet), total depth 695, dry and abandoned.

Boller and others' No. 12 Gregg, dry and abandoned at 935 feet. Burns' No. 1 Barnett, dry and abandoned at 1,187 feet. Geddes' No. 1 Bullock, dry and abandoned at 1,200 feet. Hamilton and others' No. 1 Jones, dry and abandoned at 963 feet. Honea's No. 2 Honea, dry and abandoned at 951 feet. Inman and others' No. 1 Nall, dry and abandoned at 600 feet. Melberger and others' No. 1 Marshall and others, dry and abandoned at 997 feet. White and Duncan's No. 1 Huffman, dry and abandoned at 654 feet. Wo-Mac Oil Co.'s No. 14 Stephens-Rouch Co., dry and abandoned at 740 feet.

Rocky Mountain Area

By
T. R. INGRAM

WELL IN HIDDEN DOME FIELD FLOWING 160 BARRELS DAILY

DENVER, Colo., Aug. 19.—Three new operations were reported in the Hobbs Pool, New Mexico, and two new operations started in the Monument pool. There were three completions in the Jal Pool and two good producers in the Cooper area.

Wyoming Oil & Refining Co.'s well in the Hidden Dome Field, Washakie County, Colorado, is flowing at the rate of 160 bbls. a day, the largest producer in the field, hitherto chiefly a gas field.

Colorado has a new gas field in the making in the mountainous country southwest of Denver in Park County.

NEW MEXICO

East of Monument Pool

The Amerada Petroleum Corp. spudded No. 1 State G, C SW SW Section 18-19-37. Gypsy Oil Co. was rigging up rotary for No. 1 B. V. Culp, 660 feet from N and 1,980 feet from W lines of NW ¼ Section 19-19-37, and Phillips Petroleum Co. was building derrick for No. 1 B. V. Culp, 660 feet from N and W lines of NW ¼ Section 19-19-37.

Hobbs Area

There were no completions in the Hobbs area, but three wells were shut down awaiting a proration test, as listed below.

New operations reported in the course of the week included Tide Water Oil Co.'s No. 1 State, 2,310 feet from N and 330 from E lines of NE ¼ Section 14-18-37; Gypsy Oil Co.'s No. 2 North Grimes, 330 feet from S and 1,650 feet from W lines of SW ¼ Section 21-18-38, cellar dug; and Gypsy Oil Co.'s No. 1 Taylor, 1,980 feet from N and 660 feet from E lines of NE ¼ Section 24-18-38, 3 miles northeast of the Hobbs Pool.

Amerada Pet. Corp. and Skelly Oil Co.'s No. 2-E State, NE NW NW Sec. 24-18s-37e.
Set 7-in. csg. 4,000 ft.

Continental Oil Co.'s No. 4 Grimes, SW NE SE Sec. 28-18-38.
Drlg. 3,905 ft.

Samedan Oil Co.'s No. 2-B Moom, 1,315 ft. from N line and 1,120 ft. from E line, Sec. 28-18s-38e.
Cellar and pit.

Samedan Oil Co.'s No. 2 Byers, CWL SW NW Sec. 3-19s-38e.
Drlg. 1,385 ft.

Samedan Oil Co.'s No. 1-B State, CEL SE NW Sec. 25-18s-37e.
T.D. 4,230 ft., will test.

Samedan Oil Co.'s No. 4-C State, 1,315 ft. from S and W lines, Sec. 24-18s-37e.
T.D. 268 ft.; moving in tools.

Gypsy Oil Co.'s No. 4 Graham-State, C NW NE Sec. 24-18-37.
T.D. 4,230 ft., waiting for proration test.

National Securities Oil Co.'s No. 1 Linam, NE SE SW Sec. 33-18-37.
T.D. 4,506 ft.; P.B. to 4,238 ft.; 1,000 ft. oil, 300 ft. water in hole, shut down for orders.

Shell Pet. Corp.'s No. 4 Nora Berry, 1,325 ft. W of E line and 1,315 ft. N of S line, Sec. 31-18-38.
Waiting for proration test, T.D. 4,230 ft.

Shell Pet. Corp.'s No. 2 Turner, 1,020 ft. from N line and 2,316 ft. from E line, Sec. 34-18-38.
Waiting for proration test, T.D. 4,225 ft.

Shell Pet. Corp.'s No. 2 Rice, C SW SE Sec. 13-18s-37.
T.D 4,165 ft., flowed 30 bbls. in 24 hrs., 10 per cent water, shut down for orders.

Stanolind O. & G. Co.'s No. 11 Capps, C NE SW Sec. 3-19s-38e.
T.D. 4,210 ft., acidized, flowed 40 bbls. per hr.; will reacidize.

Monument Area

Amerada Pet. Corp.'s No. 1 Andrews, W NW NW Sec. 12-20s-36.
Drlg. 3,512 ft.

Jeffers Oil Co.'s No. 1 Britt, C SE NW Sec. 7-20s-37.
U.R. 10-in. csg. 995 ft., T.D. 1,120 ft.

Lea Area

Culberson & Irwin's No. 1 Sue Richards, C SW SE Sec. 10-21s-32e.
T.D. 1,313 ft., making repairs.

Culberson & Irwin's No. 1 Eva Brown, C NE NE Sec. 23-21s-32e.
T.D. 1,585 ft.

Jal Area

Three completions was the record of the week in the Jal Pool, Lea County. Tide Water Oil Co.'s No. 1 A. B. Coates, 2,310 feet from N and W lines of Section 31-25-37, was given a 1,000-gallon acid treatment at 3,190-3,332 feet and pumped 192 bbls. in 24 hours, 15 per cent b.s. and water.

Gypsy Oil Co. completed No. 1 Arnott B, 990 feet from S and 330 feet from W lines of SW ¼ Section 32-25-37, set 5½-inch casing at 3,200 feet, found gas at 3,232-40 feet and was drilled to 3,400 feet and plugged back to 3,240 feet. It was acidized with 1,000 gallons and later swabbed 71 bbls. of oil and 77 bbls. of water. It was re-acidized and swabbed 45 bbls. of oil and 22 bbls. of water in 3 hours, with gas at the rate of 7,500,000 feet per day.

Same company completed No. 1 Vinson-Ramsey, C SE SE Section 12-26-36. It was drilled to 3,228 feet, and plugged back to test a pay at 3,140-80 feet, new total depth. It flowed 158 bbls. of oil and about 18 bbls. of sediment and water.

Harry Leonard's No. 1-B Justis, SW NW NW Sec. 20-25-37.
T.D. 2,662 ft.; R.U.R.

R. H. Henderson et al's No. 1 Ogg, C NW NE Sec. 11-25-36.
Spudded and S.D.

Jeffers Oil Co.'s No. 1 Carlson, C NW SE Sec. 27-25-37.
Drlg. 2,879 ft.

Phillips Pet. Co.'s No. 1 Woolworth, Blk. 2, C SW SW Sec. 6-25s-37e.
Drlg. 2,280 ft.

R. H. Henderson's No. 1 Langley, SE SE Sec. 8-25-37.
T.D. 3,485 ft., sulphur water 3,482-85 ft., plugging back, flowed 51 bbls. in 24 hrs.

Eunice Area

Two near completions are reported from the Eunice Area, in Lea County, California Co.'s No. 1 State, Lease 2, C SW SE Section 20-21-36 flowed 67 bbls. per hour after an acid treatment, total depth 3,950 feet and Shell Petroleum Corp.'s and Devonian Oil Co.'s No. 2 State, C NW NE Section 20-21-36 flowed 67 bbls. per hour following an acid treatment, total depth 3,944 feet. Drilling depths of other interesting wells follow:

Atlantic Oil Producing Co.'s No. 1-D State, C NW SE Sec. 20-21s-36e.
Set 8⅝-in. csg. 1,506 ft.

Atlantic Oil Prod. Co.'s No. 2-G State, C SW SW Sec. 5-21s-36e.
Drlg. at 2,800 ft. in salt and anhydrite.

California Co.'s No. 1 State, lease 2, C SW SE Sec. 20-21-36e.
T.D. 3,950 ft. flowed 67 bbls. per hr. after acid treatment.

California Co.'s No. 2 Meredith, C SE SE Sec. 19-21s-36e.
Drlg. 3,615 ft.

Continental Oil Co.'s No. 8-A-4 Meyers, C NW SW Sec. 8-21s-36e.
Drlg. 1,718 ft.

Continental Oil Co.'s No. 17-B-1 Meyers, C NE SE Sec. 17-21s-36e.
Drlg. 1,010 ft.

Continental Oil Co.'s No. 8-B-3 Meyers, C SW NW Sec. 8-21s-36e.
Drlg. 2,837 ft.

Continental Oil Co.'s No. 18-A-2 Meyers, C NE SE Sec. 18-21s-36e.
Bldg. rig.

Continentail Oil Co.'s No. 18-A-3 Lockhart, C NE SW Sec. 18-21s-36e.
Location.

Continental Oil Co.'s No. 9-B-4 Meyers, C NE NW Sec. 9-21-36.
T.D. 3,884 ft.; tested 150 bbls. per day with 10,000,000 ft. gas open; will rerun tubg. with packer; bldg. pumping derrick.

Gypsy Oil Co.'s No. 1 Orcutt, C SE NW Sec. 5-21-36.
Drlg. 2,780 ft.

Gypsy Oil Co.'s No. 2 Houston, C NE SE Sec. 7-21s-36e.
Drlg. 3,745 ft.

Humble O. & R. Co.'s No. 5-B State, C SW NE Sec. 29-21s-36e.
Drlg. 395 ft.

Jim Murray's No. 1 Wallace, SW SW SW Sec. 3-21s-36e.
Set 8⅝-in. csg. 1,473 ft.

R. Olsen et al's No. 1 State, C NW SE Sec. 5-21s-36e.
Fishing for drill pipe, T.D. 3,541 ft.

Ohio Oil Co.'s No. 1 State-Maxwell, C NE NW Sec. 16-22-36.
T.D. 3,709 ft., running 7-in. csg.

Repollo Oil Co.'s No. 3 Adkins, SW SW SE Sec. 9-21-36.
Set 7-in. csg. 3,850 ft.

Shell Pet. Corp. and Devonian Oil Co.'s No. 2 State, C NW NE Sec. 20-21s-36e.
T.D. 3,944 ft., after acidizing flowed 67 bbls. per hr., testing.

Texas Pacific Coal & Oil Co.'s No. 1-A State, Acct. 2, C SE SW Sec. 9-22-36.
Drlg. 3,682 ft., showing of gas at 3,591-3,600 ft.

Twin State Oil Co.'s No. 1 Record, C NW NW Sec. 22-22s-36e.
Set 9⅝-in. csg. 1,560 ft.

Cooper Area

In the Cooper Area, Lea County, Humble Oil & Refining Co.'s No. 3 Coates, 660 feet from N and W lines NW ¼ Section 10-24-36 was completed. It produced 1,776 bbls. on natural flow through three-quarter inch tubing choke in 24 hours. It had a gas oil ration of 395. Five and a half inch casing was set at 3,544 feet, pay at 3,570-80 feet.

Humble Oil & Refining Co. also completed No. 1 J. M. Cooper 1,980 feet from N and W lines of NW ¼ Section 14-24-36. It had pay at 3,510-27 feet and flowed 624 bbls. naturally through three-quarter inch choke in 24 hours, with a gas-oil ratio of 640.

Humble Oil & Refining Co. had cellar and pits dug for No. 3 Mosely, 1,980 feet from S and 660 feet from E lines of SE ¼ Section 10-24-36 and Stanolind Oil & Gas Co. had cellar and pits dug for No. 1 Myer B, C NW NE Section 26-24-36.

Skelly Oil Co. made a drill stem test in No. 1 Coates, 660 feet from S and 1,980 feet from E lines of SE ¼ Section 3-24-36, at 3,473-3,420 feet. It showed 180 feet of mud and a small showing of oil and gas. The crew was drilling plug. Seven-inch casing was set at 3,473 feet.

Continental Oil Co.'s No. 14-A-5 Vaughn, C NW NW Sec. 14-24-36.
T.D. 3,532 ft. in lime, flows 39 bbls. per hr. through tubing.

Continental Oil Co.'s No. 14-A-6 Vaughn, C NE SW Sec. 14-24s-36e.
Moving in material.

Continental Oil Co.'s No. 14-A-4 Vaughn (formerly No. 14-4-A), C NW SW Sec. 14-24-36.
Drlg. 3,470 ft.

Continental Oil Co.'s No. 14-A-3 Vaughn, C SW NW Sec. 14-24-36.
50 bbls. per hr. in drill stem test, 3,493-3,510 ft., will deepen.

Continental Oil Co.'s No. 15-A-2 Vaughn, C SW SE Sec. 15-24-36.
Location.

Continental Oil Co.'s No. 23-A-2 Gates, C NW NW Sec. 23-24-36.
Rig.

Continental Oil Co.'s No. 27-A-1 Gates, C SE SE Sec. 27-24s-36e.
Location.

Gypsy Oil Co.'s No. 2 Cooper, C NW SE Sec. 23-4s-36e.
Drilling 2,800 feet.

Humble O. & R. Co.'s No. 2 Moseley, C NW SE Sec. 10-24s-36e.
Drlg. 2,750 ft.

Humble O. & R. Co.'s No. 4 Coats, C NE NE Sec. 10-24-36.
Spudded.

Phillips Pet. Co.'s No. 16 Woolworth, C NE SE Sec. 27-24s-36e.
Drlg. 2,656 ft.

Skelly Oil Co.'s No. 1 Coats, C SW SE Sec. 3-24-36.
Set 7-in. csg. 3,473 ft., T.D. 3,524 ft., drlg. plug.

Tide Water Oil Co.'s No. 1 Coats, C SW NE Sec. 10-24s-36e.
Drlg. 3,100 ft.

Maljamar Area

Maljamar Oil & Gas Co.'s No. 1 Simon, C NE NE Sec. 29-17s-32e.
Location.

Bernalillo County

Norins Realty Co., Inc.'s No. 1 Gallegan grant, C NW NW Sec. 19-11n-4e.
T.D. 500 ft.; S.D.O.

Chaves County

Comanche Drlg. Co.'s No. 2 Sloop-Purcell, C NE NE Sec. 15-11s-26.
Location.

Los Chaves Dev. Co.'s No. 1 Government, C NE Sec. 2-8s-23.
Spudded and S.D.

John Tannehill's No. 1 Campbell, NE SE NE Sec. 1-11s-25.
Drlg. 235 ft. in new hole.

Warman Oil Trust's No. 1 Weldon & Hoar, NW NW SE Sec. 9-14-25.
T.D. 1,683 ft. in sand; P.B. to 1,395 ft.

Eddy County

R. D. Compton et al's No. 6 Mann, NW SW NE Sec. 4-18-27.
Drlg. 1,065 ft.

Coronado Exploration Co.'s No. 1 Anderson, C NE NW Sec. 13-20s-23.
S.D. 1,462 ft.

Dooley & Shank's No. 1 McClay, C NE SE Sec. 33-18-30.
Drlg. 3,195 ft.

Dooley et al's No. 1 Commerce Trust, NW NE SW Sec. 8-26-27.
T.D. 700 ft.; fishing 2 joints of 6¼-in.

Emperor Oil Co.'s No. 2 Puckett, C NW NE Sec. 24-17-31.
Fishing, T.D. 700 ft.

Getty Oil Co.'s No. 7 Dooley, SW SW NW Sec. 24-20-29.
Drlg. 6,067 ft.

R. G. Patillo's No. 1 Thomason, SE SE NE Sec. 12-20-28.
Drlg. 1,115 ft.

Pecos Valley Gas Co.'s No. 1 Hastie, SE NW NE Sec. 17-17-28.
Abandoned at 1,884 ft.

Rampo Oil Co.'s No. 1 State, CNL NE SE Sec. 32-17-28.
Drlg. in lime at 2,220 feet.

Red Lake Oil Co.'s No. 5 State, NW NW NE Sec. 27-17s-28e.
Spudded.

Repollo Oil Co. and C. J. Dexter's No. 3-X Parke, SE SE SE Sec. 15-17-30e.
Drlg. at 2,820 ft.

Tignor, Etz & Keyes' No. 2 Keyes, C NE SW Sec. 10-17-28.
Drlg. in lime at 1,780 ft.

Van P. Welch's No. 1 State, 320 ft. out of NW cor. Sec. 23-17s-28e.
Drlg. 790 ft.

DeBaca County

Ralph Burlingame et al's No. 1 Woods, NE SW SW Sec. 6-4n-20e.
T.D. 4,622 ft.; moving in cable tools to complete.

Guadalupe County

Anton Chico Dev. Co.'s No. 2 fee, NW NE SW Sec. 20-9n-17.
S.D. 900 ft.; changing over to cable tools.

McKinley County

A. C. Kittel's No. 1, NW NW Sec. 32-20-9w.
Material on ground.
R. W. Sanderson et al's No. 1, NE SW Sec. 21-20-9w.
Material on ground.
David K. Stacey's No. 2 Webber, SW NW Sec. 29-20-9w.
Rig on ground.

Quay County

Quay County Dev. Co.'s No. 1, C SE SW Sec. 19-9n-33e.
Drlg. 600 ft.; show of gas.

San Juan County

Aztec Coop. Oil Co.'s No. 1 Aztec, SE SW Sec. 10-30n-11w.
Material on ground.
J. F. Cross et al's No. 1 Wilson, SW SW SE Sec. 17-30-11w.
S.D. 810 ft.
Cross & Poole's No. 1 Aztec, Sec. 1-30-11w.
Making water shutoff at 740 ft.
A. E. Haney's No. 1 Hare, SE SE Sec. 14-26-11w.
Set 6¼-in. csg. at 650 ft.
Kutz Canon O. & G. Co.'s No. 1 Day, SW SW SW Sec. 20-28-10.
Drlg. 4,389 ft.; increase in gas.
R. C. Oswell's No. 4 Government, SW SW NE Sec. 34-30-11w.
S.D. 1,790 ft.
R. C. Oswell's No. 6 Government, SE NE Sec. 33-30-11w.
Spudded and S.D.
Phillips & Spence's No. 2 Martin, NW SE SW Sec. 34-30n-11w.
Drlg. 1,110 ft. in shale; 8¼-in. at 80 ft.; 5-3/16-in. at 720 ft.
Reserve Oil Co.'s No. 6 Shaffer, SE NE SE Sec. 36-22n-14w.
Location.
San Juan Pet. Co.'s No. 1 Lemley, NE SE SE Sec. 32-30-11w.
S.D. 1,314 ft.
Nick Spatter's No. 1 fee, C NE SW Sec. 32-31-11w.
U.R. 8¼-in. to 1,480 ft.; drlg. at 1,500 ft.
H. C. Stratton's No. 1 Hart, SW NE SE Sec. 25-30-12w.
Abd. at 1,680 ft.
W. R. Webb's No. 1 fee, CEL, NE NW Sec. 6-30-11w.
P.B. from 1,500 ft. to 1,250 ft.; set pipe and preparing to test.

San Miguel County

Cabra Springs O. & G. Co.'s No. 1 Thompson, SW NE NE Sec. 22-12n-22e.
S.D. 4,030 feet.
Cabra Springs O. & G. Co.'s No. 2 West Pino Mesa, SW SW SW Sec. 31-12-22.
S.D. 726 feet.
Pioneer Oil Co.'s No. 2 Montezuma, CSL SE SW Sec. 14-15n-16.
Drlg. 300 feet.
Starr-Kennedy Oil Co.'s No. 3 Adams, NE NE SE Sec. 25-17-16.
Standing at 5,090 ft. after completing rig; to resume following fire.
Holmberg Interest's No. 1 Cantwell, NW NW NW Sec. 5-10n-9e.
S.D. 510 ft. (corrected).
Kelsey Clients Dev. Estate's No. 2 State, C NW Sec. 22-10n-16e.
S.D. 1,450 ft.

Torrance County

45 Pet. Co.'s No. 1 Greenfield, C NW SW Sec. 17-9n-8e.
T.D. 1,216 ft., fishing for tools.

Union County

Sierra Grande Oil Corp.'s No. 1 Rogers, C NE SW Sec. 4-29-26.
T.D. 2,715 ft., in granite.

Valencia County

Pres-Sel Dev. Co.'s No. 1 Morris, SE NE Sec. 30-12n-10w.
Drlg. 400 ft.
Ringle Dev. Co.'s No. 2 Tome grant, C NE SE Sec. 26-6n-2e.
Rigged and S.D.
Ringle Dev. Co.'s No. 1 Tome grant, C SE SE Sec. 36-6n-2e.
S.D. 400 ft.
Western Natural Resources Corp., Inc.'s No. 2 San Clemente, SE SE NW Sec. 5-6n-1e.
T.D. 6,661 ft.

Rio Arriba County

El Verdo Structures Property Co., Ltd.'s No. 1-A Tierra Amarilla grant, NE Sec. 26-2n-1e (unsurveyed).
Rigging up.

Roosevelt County

R. M. Hancock et al's No. 1, 33 ft. from W line and 1,000 ft. from N line, Sec. 21-1n-37.
Drlg. below 200 ft.

Sandoval County

Continental Oil Co.'s No. 1 L-Bar Cattle Co. 630 ft. N and E ¼ cor. Sec. 8-12n-4w.
Drlg. 2,940 ft. in red shale.

COLORADO

Colorado has a new gas field in the making, in the high mountainous country southwest of Denver in Park County.

Adams County

Riddle Pet. Co.'s No. 1 Baxter, C SW Sec. 2-3s-66w.
Standing partly rigged and drlg. wtr. well; T.D. 940 ft.; 6⅝ ft. cmt. at 900 ft.; drlg. plug.

Archuleta County

Wm. E. Hughes Est.'s No. 1 fee, SW Sec. 24-33n-3e (unsurveyed).
Drlg. 1,200 ft. with showing of oil at 1,090 ft.
Oil City Pet. Co.'s No. 1-A Garnett, NW NE NW Sec. 25-33n-2e.
Drlg. 1,200 ft.
Navajo Oil Co.'s No. 1 Crowley, SW SW NE Sec. 11-32n-1e.
S.D. at 830 ft. for 5 3/16-in. csg.

Baca County

J. H. Everett et al's No. 1, 330 ft. NW cor. Sec. 24-32-48.
Spudded wtr. well.

Boulder County

Leslie R. Steele et al's No. 1 Maxwell, SW NE NW Sec. 24-1n-71.
Drlg. 1,645 ft.

Elbert County

Ramsey Pet. Corp. and C. E. Lambert's No. 1, near C Sec. 13-8s-57w.

Fremont County

Waterville Oil Co.'s No. 1 State, SE SE S of N line, and 220 ft. E of W line, Lot 4, Sec. 23-4n-92.
Running tubing to test at 3,450 ft.; flowing at rate of 10 bbls. of oil per hr.

Montezuma County

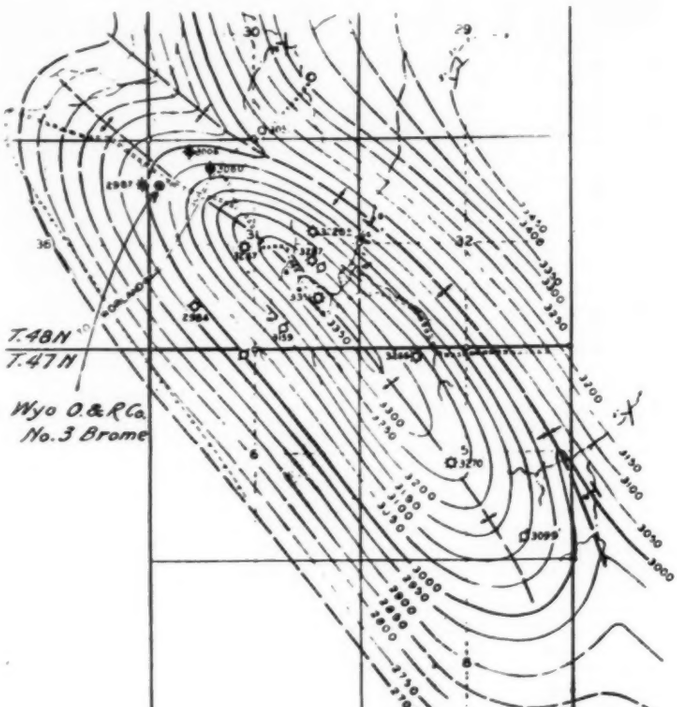
McElmo Oil Co.'s No. 1 West, NE NW NE Sec. 21-36n-17w.
T.D. 3,131 ft.; reamed to 3,000 ft. and running 6⅝-in. csg.

Morgan County

Swisher et al's No. 1 Lunt, 92 ft. W of E line and 360 ft. N of S line, Sec. 3-4n-60.
Ran 4½-in. to 820 ft. and drlg. 830 ft.

Park County

The test of the South Park Oil Co., No. 1 State, SE SE SW Section 16-11s-75w, on the Hartsel anticline in South Park, has developed a measurable quantity of gas in Pierre shale



—Courtesy of Petroleum Information, Inc., Denver.

Structure map of Hidden Dome in Washakie County, Wyo., showing location of new flowing well of Wyoming Refining Co.

NW Sec. 16-18s-69w.
T.D. 2,780 ft.; 150 ft. of oil in hole; U.R. 6 3/16-in. at 2,750 ft.

Grand County

Colorado Oil Ref. Co.'s No. 1 Linke, NE SW SW Sec. 12-1n-77w.
Drlg. 2,300 ft.; showing gas and some oil.
Interstate O. & G. Co.'s No. 1 Hinman, NE SE NW Sec. 11-2n-81.
S.D. 2,997 ft.

Huerfano County

S. W. Pressey's No. 1 Ojo, SW NE Sec. 10-26-69.
S.D. 2,550 ft.

Jackson County

Colorado Oil Ref. Co.'s No. 1 North Park Coal, NW NW Sec. 18-9n-78.
T.D. 1,805 ft.; set 12½-in. csg. at 1,580 ft.; T.D. 1,800 ft.
Continental Oil Co.'s No. 3 Hoye, NW NW NE Sec. 34-9n-78.
Drlg. 3,787 ft. in shale and shells.

Jefferson County

Ruby Hill O. & G. Co.'s No. 1 Braden, SE cor. Sec. 24-4s-69.
S.D. 4,280 ft.

Las Animas County

Mountain State Oil Corp.'s No. 1 Nickols, C NE NE SE Sec. 10-34-62.
S.D. 1,640 ft.

Lincoln County

Consolidated Smelting & Metals Co.'s No. 1 Hancock, NE NE Sec. 7-17s-52.
T.D. 1,700 ft.; fishing for bailer.

Moffatt County

Stanolind O. & G. Co.'s No. 5-S Parkinson, NW cor. SE Sec. 22-4n-92.
Drlg. shale 1,465 ft.
Texas Co.'s No. 2 Ilea Investment, 620 ft. at 2,527 feet and is drilling ahead and carrying 8¼-inch casing at 2,520 feet. The well is of particular interest as it is located in the high mountains southwest of Denver, at an altitude of 9,386 feet above sea level. The location is in a downthrow fault block completely surrounded by high mountains which attain altitudes of as much as 14,000 feet. The well has for its first objective a sand in the Pierre representing some phase of the Hygiene sandstone of the Front Range.

Prowers County

Trojan O. & G. Co.'s No. 1 Lotus Oil, NW NE NE Sec. 15-23-46.
Drlg. below 5,324 ft.

Routt County

Mid-Colo. Pet. Co.'s No. 1 Omhalt, NE NE SE Sec. 29-4n-87w.
T.D. 2,750 ft.; preparing to run 8¼-in. to bottom wtr. in Dakota; show of gas at 2,750 ft. on top Lakota.

UTAH

Mountain Fuel Supply Co.'s No. 2 Murphy, NE NE Sec. 21-3n-24w.
T.D. 6,790 ft.; P.B. to 5,750 ft. and completed for 13,000,000 ft. of gas in Dakota sands at 5,627-5,750 ft.

Grand County

Columbia Crude Co.'s No. 1 Balsey, SW SE Sec. 12-25s-20e.
R.U. and ready to spud.
Utah Southern Oil Co.'s No. 1 Hyde, SE NW NW Sec. 3-22s-22e.
R.U.; moving in tools.

Summit County

Longwell Pet. Co.'s No. 1, SE SW SE Sec. 35-3n-5e.
Resuming at 850 ft.; trying to U.R. 10-in. to bottom to shut off wtr.

Utah County

Diamond Oil Co.'s No. 4 Government, CSL SE NW Sec. 16-8s-5e.
Drlg. 3,735 ft.; showing considerable gas.

Washington County

Arrowhead Pet. Co.'s No. 2 Escalante, NW NW NE Sec. 19-42-15.
T.D. 4,114 ft.; P.B. to 3,250 ft.; shot and C.O.
Arrowhead Pet. Co.'s No. 1-A, SE SW NE Sec. 1-43-15.
Drlg. 1,400 ft.

MONTANA

Big Horn County

Daniels Pet. Co.'s No. 1 May, C SE SE Sec. 13-1s-33e.
Drlg. 2,261 ft.
Enterprise Oil Co. et al's No. 2 Lynde, SW SW SE Sec. 21-6s-35e.
Drlg. 3,700 ft.

Carbon County

Bailey Round Butte Oil Co.'s No. 1, 1,120 ft. W of E line and 3,140 ft. N of S line, Sec. 3-6s-23.
Drlg. 1,326 ft.
Ohio Oil Co.'s No. 15 Montana Industrial, C NE NE Sec. 11-7s-21.
T.D. 4,350 ft.; comp. in Frontier sands for 4,500,000 ft. gas

Cascade County

C. Leonard Smith's No. 1, NE NE SW Sec. 14-22n-2e.
Fort Worth spudder on location.

Choteau County

Mills & Decker's No. 1, NE NW Sec. 29-27n-13e.
Rig up.

Fallon County

Montana-Dakota Utilities Co.'s No. 1, NE NW Sec. 17-3n-62e.
Rig up; moving in rotary tools.

Fergus County

Button Butte O. & G. Co.'s No. 1 Woodward, SE SE SW Sec. 20-14n-24.
Drlg. 3,095 ft.
Emmons et al's No. 1, 220 ft. W of E line and 2,140 ft. N of S line, Sec. 6-20-18.
Drlg. 1,317 ft.
S. W. Pennock et al's No. 1 Nordheim, NW NE NE Sec. 6-21n-18e.
S.D. 480 ft. (corrected).
E. A. Fenholt's No. 1, NW NW SW Sec. 24-21n-17e.
Moving in drilling machine.
Judith Operating Co.'s No. 1 Gov't., C SW SW Sec. 26-22n-17e.
Spudding 200 ft.

Gallatin County

Montana Gas & Pet. Corp.'s No. 1 Adams, SE SE SE Sec. 36-2n-1e.
S.D. 2,400 ft.
Ben W. Ryan's No. 1 Tice, NE NE NE Sec. 28-1n-2e.
Drlg. 2,475 ft.

Glacier County

There were four completions in the active Cut Bank Field during the past week; four wells are near completion and one well was abandoned. Three new locations were released.

Montana Power Gas Co. completed its No. 2 Bonnett, in the SW SW NW of Section 4-32n-5w, in Cut Bank sand at 2,915-2,925 feet. The well filled up 1,300 feet with oil and swabbed 105 bbls. of oil in the first 24-hour period after completion.

The Texas Co.'s No. 1 Emaline Morgan, C NE NW of Section 33-33n-5w, was completed in Cut Bank sand from 3,000 to 3,047 feet and was drilled into the Ellis shale 10 feet to a total depth of 3,057 feet. The hole filled up 2,200 feet with oil and the well swabbed 81 bbls. of oil in the first three-hour period; 140 bbls. in the first 12-hour period, and 361 bbls. in the first 60-hour period.

Santa Rita Oil & Gas Co.'s No. 5 Tribal, C SW NW of Section 15-35n-6w, had Cut Bank sand from 2,916 feet to 2,944 feet, where the hole filled up 1,800 feet with oil. It was drilled 5 feet into the Ellis shale to a total depth of 2,949 feet.

Anderson's No. 2 Anderson, SE SE NW of Section 26-35n-6w, has been

completed in the Cut Bank sand from 2,840 feet to 2,867 feet, where the hole filled up 1,800 feet with oil. It was drilled into the Ellis shale to a total depth of 2,872 feet.

Grant Oil Co.'s No. 1 Bakke, a near completion in the C NW NE of Section 32-34-5w, developed an open flow of 5,000,000 feet of gas in sand from 2,655 feet to 2,660 feet. The 8¼-inch casing has collapsed and swadging operations are in progress.

Santa Rita Oil & Gas Co.'s No. 1 Savage, in the C NE SW of Section 9-33n-5w, is running 6⅝-inch casing to set at 2,850 feet. The well developed 8,000,000 feet of gas with a showing of oil at 2,830-50 feet. The 8¼-inch casing has been set at 2,830 feet on top of the gas sand.

The Texas Co. has two near completions, one in its No. 1 Small, C NW NE of Section 23-35n-6w, where the 7-inch casing has been set at 2,805 feet and is drilling at 2,826 feet, and its No. 1 Tweedy, in the C N half NE of Section 21-35n-6w, where the 7-inch casing has been set at 2,975 feet and is drilling at 3,012 feet.

Lawler & Hoerr's No. 1 Downen, C SE SW of Section 9-33n-5w, has been abandoned in the Ellis shale at 2,925 feet. The well had only a small showing of oil in the Cut Bank sand at 2,885-95 feet.

Chas. Grant's No. 1 Askins, Lot 24, Blk. 33, Sec. 12-33-6w.
S.D. 2,700 ft.; (formerly Askin's No. 1 Askins).

Consolidated Gas Co.'s No. 2 State, C NW SE Sec. 26-35-6w.
Drlg. 2,670 ft.

Consolidated Gas Co.'s No. 2 Tribal, Lot 5 (NW NE), Sec. 10-34n-6w.
Drlg. 2,820 ft.

Custer Oil Co.'s No. 1 Tweedy, 440 ft. from W line and 330 ft. from N line, NE Sec. 36-33n-6w.
Drlg. 2,040 ft.

Goodstein & Smith's No. 1 Olson, C NE SE Sec. 26-34-6w.
Drlg. 2,710 ft.

L. R. Hannah, trustee's No. 2 State, 93 ft. from E line and 158 ft. from N line, Sec. 12-33n-6w.
Rig on location.

R. C. Jeffries' No. 3 Lukens, 360 ft. N of S line and 1,540 ft. S of E line, Sec. 1-33n-6w.
10-in. cem. at 601 ft.; W.O.C.

Montana Headlight Oil Co.'s No. 2 Britton, 660 ft. E of W line and 440 ft. N of S line, SE Sec. 11-34n-6w.
Drlg. 2,070 ft.

Montana Power Gas Co.'s No. 1 Colburn, C SE SW Sec. 5-33n-5w.
Drlg. 1,010 ft.

Montana Power Gas Co.'s No. 1 Clapper Unit, SW SW SW Sec. 27-35n-5w.
Drlg. 2,590 ft.

Montana Power Gas Co.'s No. 1 Koplipk & Hall, C SW SE Sec. 35-35n-6w.
Location.

Olive Oil Co.'s No. 4 Winkler, 725 ft. S of N ¼ cor. Sec. 35-35-6w.
Drlg. 2,602 ft.

Santa Rita O. & G. Co.'s No. 2 McCage, NW SE NE Sec. 31-33-5w.
Location.

Santa Rita O. & G. Co.'s No. 1 Stahl, C NW SE Sec. 20-33-5w.
Drlg. 2,670 ft.

Santa Rita O. & G. Co.'s No. 1 Savage, C NW SW Sec. 9-33-5w.
Running 6⅝-in. 2,850 ft.

R. C. Tarrant's No. 4 Miller, C SE NE Sec. 24-34n-6w.
Location.

R. C. Tarrant's No. 2 Getty, NW NW SE Sec. 2-34-6w.
T.D. 2,700 ft.; will skid rig.

R. C. Tarrant's No. 4 Britton, C SW SW Sec. 12-34-6w.
10-in. cem. 497 ft.; W.O.C.

R. C. Tarrant's No. 6 Haglund, Jr., C SE NW Sec. 13-34-6w.
Rig on location.

R. C. Tarrant's No. 2 Larson, C W½ W½ NE Sec. 12-34-6w.
Drlg. 375 ft.

R. C. Tarrant's No. 2 McClellan, C NW SE Sec. 12-34-6w.
Drlg. 2,015 ft.

R. C. Tarrant's No. 2 Yunck, CEL NW Sec. 12-34n-6w.
Rig on location.

Texas Co.'s No. 2 Peterson, C SW Sec. 23-36n-5w.
Drlg. 1,212 ft.

Texas Co.'s No. 1 Morgan, C NE NW Sec. 33-33-5w.
Recmtd. 7-in. csg. 3,030 ft.; drlg. in.

Texas Co.'s No. 1 Mueller, CWL SW SW Sec. 2-35n-6w.
Location.

Texas Co.'s No. 1 Small, C NW NE Sec. 23-35n-6w.
Drlg. 2,826 ft.

Texas Co.'s No. 1 Section 9 Unit, C NW SE Sec. 9-32n-5w.
Drlg. 1,950 ft.

Texas Co.'s No. 1 Tweedy, C N½ NE Sec. 21-35n-6w.
Drlg. 3,012 ft.

Watson & Kistner's No. 1 Britton, C SE SE Sec. 14-34n-6w.
Cem. 10-in. 550 ft.; W.O.C.

Phillips County

Little Rocky Dev. Co.'s No. 1, SE SE SE Sec. 17-24-24.
S.D. to finance at 352 ft.

Pondera County

Norden Corp., Ltd.'s No. 1 Hollan, NW NW NW Sec. 12-28n-6w.
S.D. at 500 ft. to complete leasing.

Texas Co.'s No. 1 Unit, C SW SW Sec. 3-30-5w.
T.D. 2,540 ft.; rebldg. derrick.

Stillwater County

Continental Oil Co.'s No. 1 Parker, 500 ft. N of S line and 660 ft. E of W line, SE Sec. 25-5s-17e.
Cellar and pits.

Continental Oil Co.'s No. 1 Orr, SW NW SE Sec. 18-5s-17e.
Coring 3,786 ft. in reddish-brown lime.

Toole County

The latest report from the Kevin-Sunburst Field carries three completions and three first reports. The best of the completions is the Texas Co.'s No. 10 Bruins, C S half SW of Section 10-35n-2w, which was completed in the Ellis-Madison contact at 1,600-15 feet, produced 202 bbls. of oil in 24 hours after treatment with 1,000 gallons of acid. In the next 22 hours the well produced 130 bbls. of oil. Before acid treatment the well was practically dry.

Crumley & Son's No. 3 Fryberger, NW SE SE of Section 24-35n-3w (corrected location), had the Ellis-Madison contact at 1,545-63 feet and was drilled to 1,575 feet. It is pumping from 35 to 40 bbls. of oil a day.

A. E. Crumley's No. 6 Shaw, SW NW SE of Section 35-36n-2w, had Sunburst sand at 1,584-96 feet and was drilled to 1,597 feet. It is now cleaning out and testing after a 40-quart shot.

In the East Shelby gas field, Frazer & Kluth's No. 1 Severence, C SE NE of Section 29-32n-2e, encountered a hole full of water in a stray sand at 1,640-45 feet and the well has been abandoned.

Montex Petroleum Co.'s No. 1 Blair, NW NW SW of Section 27-34n-1e, found the Sunburst sand dry at 1,425-53 feet and encountered water in a stray sand at 1,530 feet. Probably the well will be abandoned.

Cassidy and Cassidy's No. 1 Veitch, 220 ft. W of E line, 660 ft. N of S line, Sec. 31-35n-2w.
Drlg. 720 ft.

Coolidge & Coolidge's No. 2 Government, SW NE SE Sec. 35-36-2w.
Drlg. 1,425 ft.

P. L. Eddy's No. 5 Seabrook, NE SW SW Sec. 19-35-2w.
Drlg. 500 ft.

Graham O'l Co.'s No. 2 McDonald, CEL SW SW Sec. 19-35n-2w.
S.D. 16 ft.

Imperial-Craig Oil Co.'s No. 17 Bloom, Sec. 19-35n-1w.
Drlg. 515 ft.

Imperial-Craig Oil Co.'s No. 1 Martin, SW SE SE Sec. 18-35n-1w.
Location.

T. P. Kyle's No. 1 Clark, SW SW SE Sec. 19-27n-1e.
Drlg. 1,990 ft.

Fred R. Mauger's No. 1 Government, SW NE NW Sec. 13-35n-2w.
Spudded and S.D.

Monopeg Oil, Ltd.'s No. 3 Dipple, S SW NW Sec. 28-35-1w.
Sidetracked tools at 1,335 ft.

Mon-Tex Pet. Co.'s No. 1 fee, NW SW Sec. 27-34-1w.
Water in stray sand at 1,530 ft.; S.D.O.

Potlach Oil & Ref. Co.'s No. 6 fee, SE SE SW Sec. 21-34n-1w.
Location.

E. O. Reickhorr's No. 2 Government, SW SW NE Sec. 3-35-3w.
S.D. 285 ft.

C. Leonard Smith's No. 1 Eckhoff, C SE Sec. 6-33n-2e.
S.D. 575 ft. for new boiler.

C. Leonard Smith's No. 1 Federal Land Bank, C NE SE Sec. 11-33n-1e.
Spudding at 175 ft.

C. Leonard Smith's No. 1 L. Halverson, C NE SE Sec. 18-33n-2e.
Drlg. 1,000 ft.; showing 1,000,000 ft. gas.

C. Leonard Smith's No. 1 H. Halverson, NW NE Sec. 18-33n-2e.
Rigging up rotary at 250 ft.

WYOMING

Albany County

California Co.'s No. 2 Holst, SW NE SE Sec. 13-17n-77.
Drlg. 2,925 ft. in shale.

California Co.'s No. 1 Wilson, NW SW SW Sec. 18-17n-76.
Drlg. 1,010 ft. in shale.

Big Horn County

J. W. Bales' No. 1 Parker, C SW SW Sec. 23-49-89.
Drlg. 365 ft.

Peter Evanoff's No. 1 Griffin, Lot 60, Sec. 4-55-97.
S.D. 1,594 ft.

Peter Evanoff et al's No. 1 McAllister, Lot 56, NW NE SE Sec. 3-55n-97w.
Drlg. 858 ft.

W. S. Gilbert's No. 1 Zaring, SE SE SE Sec. 35-52-93w.
Drlg. 610 ft.

McAlpine O. & G. Co.'s No. 2, SE SE NW Sec. 3-55n-97w.
Moving in materials.

Ohio Oil Co.'s No. 2 Sidon Canal, C SW SW Sec. 24-56-97.
T.D. 5,275 ft.; top Tensleep sand 5,139 ft.; swabbed 350 bbls. oil; R.U. to pump.

Ohio Oil Co.'s No. 3 Byron Union, SE NW NE Sec. 22-56-97.
Drlg. 4,245 ft. in shale.

Ohio Oil Co.'s No. 4 Byron Union, SW NE Sec. 22-56-97.
Rig up.

Ohio Oil Co.'s No. 3 Sessions, NW SW NW Sec. 33-56n-97w.
Rigging up rotary.

Montana-Wyoming Oil Co.'s No. 1 Government, Lot 52, Sec. 18-56n-97w.
Location; first report.

Peay Oil Co.'s No. 2 Government, SE SE SE Sec. 10-55n-97w.
Moving in material.

J. H. Shaffer's No. 1 Keachie, C SW SW Sec. 7-49-91.
Drlg. 1,186 ft.

Taylor Oil Co.'s No. 1 Hoskins, Lot 5 (SE SE), Sec. 25-56-97.
C.O. to bottom at 5,275 ft. and making new hole.

Wyoming O. & R. Co.'s No. 1 Evans, NE NE NW Sec. 12-49-91.
Set 1½-in. at 85 ft. (cor.) and S.D.

Carbon County

The Ohio Oil Co.'s No. 4 Diamond Cattle Co., SE SW NW Section 35-20n-78w, Sundance sand test in the old Rock River Field, has plugged back from 3,537 feet to 3,115 feet and has cemented 6¼-in. liner for a test of production in the upper part of the Sundance section. The well encountered water in the lower Sundance at 3,520 feet.

Ohio Oil Co. and California Co.'s No. 2 State, C NW NW Sec. 36-21n-79w.
Drlg. 2,504 ft. in shale.

Ohio Oil Co. and California Co.'s No. 1 Union Pacific, Acct. J, NE SW NW Sec. 25-21-79w.
Rigging up.

General Pet. Corp.'s No. 1 Whitford, SW SE NE Sec. 24-20-84.
Drlg. in sandy shale 4,932 ft.

General Pet. Corp.'s No. 1 Union Pacific, C SW SW Sec. 19-20-83.
S.D. 5,931 ft.; may be deepened.

Sinclair-Wyoming Oil Co.'s No. 9 Wertz, NE NW NW Sec. 7-26n-89w.
Location; first report.

Converse County

Chadron-Osage Oil Co.'s No. 1 State, SW cor. Sec. 16-32-69.
Drlg. 1,000 ft. and carrying 12½-in. csg.

Continental Oil Co.'s No. 60 State, NW SW NE Sec. 9-33-76.
Drlg. 2,195 ft.

Continental Oil Co.'s No. 9 Whiteside, 3,680 ft. S of N line and 1,072 ft. W of E line, Sec. 7-33-76.
Fishing for core barrel 4,487 ft.

Otto Olson et al's No. 1 Carey, Sec. 6-32-74.
S.D. 642 ft.

John Ackard's No. 1 Daniels, SW SW SE Sec. 17-32-71.
S.D. 2,600 ft.

Crook County

Dr. R. B. Kinter's No. 1 Rockfort-Wyoming, CNL NE SE Sec. 13-52n-62w.
Drlg. 1,325 ft.

Fremont County

Mid-American Oil Co.'s No. 3 Government, NW NE SW Sec. 24-28-92.
Fishing for parted 10-in. csg. 800 ft.

Monongahela Oil Co.'s No. 1 Wisda, NE SE SE Sec. 13-28-93.
S.D. 4,150 ft. for water.

Nelson & Poupiert's No. 3 Enos, Lot 7, Sec. 27-3n-1w.
Drlg. 836 ft.

Hot Springs County

Argo Oil Co.'s No. 1 Rathvon-Government, NE SW NW Sec. 14-44n-98w.
Cmtd. 12½-in. csg. 1,000 ft.

California Exploration Co.'s No. 2 Government, NW SW NW Sec. 7-44-96.
S.D. for water 2,518 ft.

Ohio Oil Co.'s No. 72 Millsiron Cattle Co., NE SE SE Sec. 19-46n-98w.
Moving in rotary.

Oscar G. Grace's No. 1 Government, SW NW NW Sec. 21-43-92.
Drlg. 500 ft.

Lincoln County

Senrab Oil Co.'s No. 3 Government, N SE NW Sec. 10-26-113.
S.D. 1,011 ft.

Superior-Wyoming Oil Co.'s No. 2-B, Lot 3 (NW NW), Sec. 3-26n-113w.
Drlg. 700 ft.

Niobrara County

Argo Oil Co.'s No. 4 Elliott, C NE NW Sec. 5-35n-65w.
Coring 3,798 ft.

Black Hills Ref. Co.'s No. 1 Wright, SE SE SW Sec. 23-36-94.
Some material on location.

Continental Oil Co.'s No. 5 Rohiff, 550 ft. E of W line and 580 ft. N of S line, SW Sec. 31-36n-66w.
Drlg. 460 ft.

J. H. Huber Co.'s No. 1 Joss, NE SE NW Sec. 6-35n-65w.
Rigging up.

Interstate O. & R. Co.'s No. 1 Morrell, NW NE SE Sec. 9-39-61.
T.D. 3,030 ft.; P.B. to 2,835 ft.; S.D.

Fall River Royalty & Producers Co.'s No. 5-L Briggs, CSL NE NE Sec. 2-39n-61w.
Drlg. 300 ft.

Ohio Oil Co.'s No. 5 Converse Sheep, C SE SW Sec. 32-36n-65w.
Rig up.

Ohio Oil Co.'s No. 7 Lamb, C NW NE Sec. 5-35n-65w.
Rig up.

Ohio Oil Co.'s No. 2 Lamb, NE NW NE Sec. 5-35-65.
T.D. 3,707 ft.; 4½-in. at 3,642 ft.; R.U. pumping unit.

Ohio Oil Co.'s No. 4 Putnam, C SW SW Sec. 33-36-65.
Drlg. 2,810 ft. in shale and shells.

Riggs Drlg. Co.'s No. 1 Spaugh, NW NW SE Sec. 5-33n-65w.
Rigging up.

S. & H. Dev. Co.'s No. 1-A Olinger, SE NE NW Sec. 1-36-63.
Drlg. 1,600 ft.

Park County

Geo. T. Beck's No. 1 fee, NW SE NW Sec. 27-33-101.
Drlg. 1,321 ft.

Garland Oil Co.'s No. 2 Government, SE NE NW Sec. 14-56-98.
S.D. 2,160 ft.

Resolute Oil Co.'s No. 1 State, C NW SW Sec. 16-57-101.
S.D. 3,608 ft.

Sheridan County

Beaver Creek Oil Synd.'s No. 1 Allison, SW SE Sec. 15-55-85.
S.D. 2,660 ft.

Sublette County

Texas Co.'s No. 6-K, Sec. 34-27n-113w.
13-in. cmtd. at 105 ft.

Piney-LaBarge Oil Co.'s No. 2 Government, CEL NE NW Sec. 18-28-113.
Drlg. below 520 ft.

Sweetwater County

Vermillion Oil Co.'s No. 1 Government, SW SW SW Sec. 7-12n-99w.
Location; first report.

Wyoming-California Pet. Co.'s No. 1 Government, SE cor. Sec. 20-16-104.
Testing gas show 2,395 ft.

Uinta County

Sinclair-Wyoming Oil Co.'s No. 1 U.S.P. lease, SW SE NW Sec. 10-26n-90w.
Location.

General Pet. Corp. of Utah's No. 1 Union Pacific-Hayes, SW NW SW Sec. 29-14n-118w.
Drlg. 1,435 ft.

Washakie County

Wyoming Oil & Refining Co.'s No. 3 Brome, SW NW NW Section 31-48n-9w, recent completion in the Hidden Dome Field, has been deepened from 1,535 feet to 1,540 feet and is flowing 160 bbls. of oil a day. This is the largest well ever completed in the limited shallow-oil area of this important gas field.

Arlton & Doyle's No. 1 Government, SW SW SE Sec. 29-48n-91w.
Spudding.

Nystrom & Smoot's No. 2 State, SW NE NE Sec. 36-48n-90w.
8¼-in. cmtd. 1,574 ft.; T.D. 1,738 ft.

Wyoming O. & R. Co.'s No. 1 Frison, NW SW NW Sec. 14-48-91.
Drlg. 1,710 ft.

Weston County

Conway Oil Corp.'s No. 1 Government, C SE NW Sec. 7-41-60.
Fishing for tools 2,087 ft.

Karl Kundy's No. 3 Government, NW cor. NE Sec. 31-46-63.
Sands at 1,370-78 and 1,400-07 ft.; est. 25 bbls.; will deepen and shoot.

Beaver Creek Oil Synd.'s No. 1 State, C NE NE Sec. 22-44-63.
Spudded and S.D.

Des Moines-Osage Syndicate's No. 10, NE NE NE Sec. 25-36n-64e.
Spudding at 200 ft.

La Lleishe Oil Co.'s No. 18 fee, C SW SW Sec. 17-46-63.
Drlg. 750 ft.

L. C. Packham's No. 1, NW NW NW Sec. 19-46n-63w.
Resumed at 450 ft.; R.U. to run 8¼-in. to bottom.

Albert Jones' No. 10 Bock, CSL NW NE Sec. 21-46n-63w.
Spudding 200 ft.

Southwest Texas District

By
GEORGE WEBER

FRIO COUNTY WILDCAT WELL ESTIMATED LARGE PRODUCER

SAN ANTONIO, Tex., Aug. 19.—Frio County became the focus of attention this week end as the wildcat well, Amerada Petroleum Corp.'s No. 1 D. F. Smith, was brought in for a large producer in the Buda lime at 5,920-27 feet. The well is on at 1,476-acre tract in the Joseph V. Mason Survey, 5½ miles southwest of the Pearsall Field. The flow of oil has not yet been gauged as the well is cleaning itself, but an estimated 50 to 100 bbls. per hour is flowing through the casing. With the tubing closed in and with variable chokes on the casing from five-sixteenths to five-eighths inch, the pressure stood at about 500 pounds.

This is the eighth wildcat well to be drilled by Amerada in a block of about 83,000 acres leased five years ago. Drilling began in May and the hole was carried to a total depth of 6,238 feet this month where it showed sulphur water. It was then plugged back to its present depth for a test. The production at nearly 6,000 feet places this new field as a deep one in comparison with other Southwest Texas pools. It will provide stimulus for more deep drilling in this area.

Wildcat Operations

Wildcat wells throughout Southwest Texas continued to occupy the center of interest. In the Rio Grande Valley district three wildcats were abandoned and three producers completed. The new production was all in the Sam Fordyce Field. Harrison Oil Co.'s No. 3 Lula George, Windsor Oil Co.'s No. 3 Doss and Kingwood Oil Co.'s No. 6 Guerra were brought in for allowable production. The Sam Fordyce property of the latter company has been purchased by Ralph E. Fair of Dallas and will be listed under the company name of Ralph E. Fair, Inc.

Bluff Petroleum Co.'s No. 1 Porcion Land Co., was abandoned this week at a total depth of 5,539 feet. This wildcat is in Share 14, Porcion 49, Jurisdiction of Reynosa, near the town of Mission. Maddox, Turnbull and Irwin's No. 1 John Shary in Block 21, Porcion 58, was also abandoned this week at 6,010 feet. E. H. East's No. 1 Scarborough in the Tule grant was abandoned after being shut down for some time.

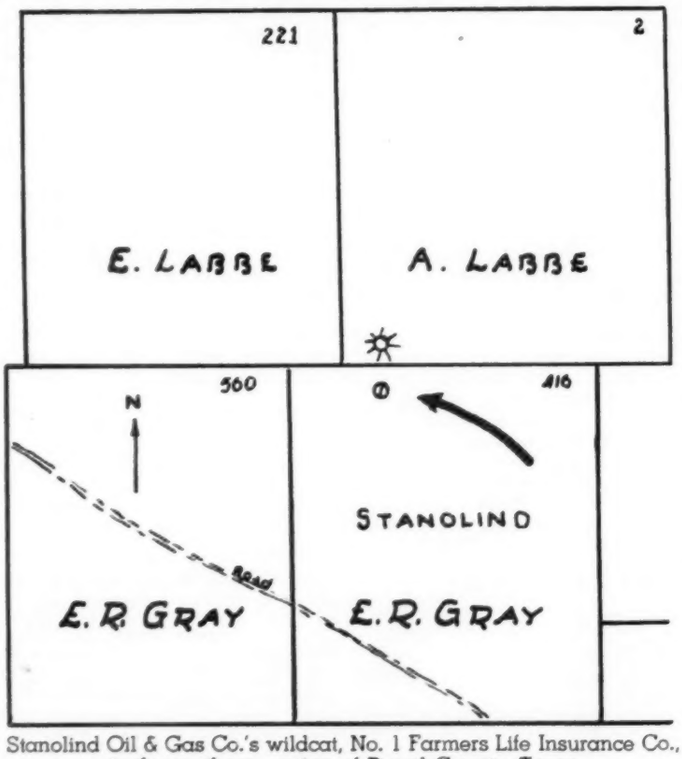
Hidalgo County

The deep Mercedes Pool in southeastern Hidalgo County drew interest with three Union Sulphur Co. wells drilling. No. 1 American-Rio Grande was coring shale at 7,600 feet. Production in No. 3, discovery well, is at 7,477-93 feet. No. 4 American-Rio Grande is drilling below 6,900 feet, and No. 5 is at 3,170 feet.

In the south edge of Sam Fordyce Field, water trouble has led to the granting of several special allowables exceeding the 40-bbl. standard. The new allowables range from 45 to 73 bbls. per day and are retroactive to August 1.

Duval County

Six completions in the Loma Novia placed it first in Duval County activity during the week. Bridwell Oil Co.'s No. 1 Bishop Cattle Co. in Survey 76, was completed for a 100-bbl. well at 2,689 feet. Highland Oil Co.'s No. 2 Hubbard in Survey 72 is jetting 15 bbls. per hour at 2,752 feet.



Stanolind Oil & Gas Co.'s wildcat, No. 1 Farmers Life Insurance Co., in the northern portion of Duval County, Texas

The same company's No. 3 Hubbard, same survey, is making 100 bbls. per day, with production at 2,710 feet. Duval Oil Co.'s No. 2 Moody in Survey 76 is completed at 2,687-2,710 feet and is jetting 10 bbls. of oil per hour. Henderson and Harvey's No. 1 Ruiz is flowing 42 bbls. per day through a one-eighth inch choke. Production is at 2,662 feet. A gasser was completed by Claude Hamil in his No. 1 Kerr. The well, in Survey 41, is making 25,000,000 feet of gas from 2,544 feet. The rock pressure is reported at 750 pounds.

Two gas wells were also brought in in the Seven Sisters Field in northern Duval County. Santa Clara Oil Co.'s No. 5 J. F. Welder is making 35,000,000 feet of gas with a rock pressure of 925 pounds. Humble Oil & Refining Co.'s No. 2-A Serna, Section 384, B.S.&F. Survey, is making 20,000,000 feet per day and is spraying oil. Production is from 2,480 feet.

Stanolind Oil & Gas Co.'s No. 1 Farmers Life Insurance Co., in Section 416, E. R. Gray Survey, in northern Duval County, tested salt water Saturday. The casing is set at 2,449 feet and there is a possibility the salt water is coming from above the casing set or from the bottom of the hole at 2,460 feet. To check the latter possibility, 8 feet of cement is being set in the bottom of the hole. This will show whether the salt water is coming from the bottom or from the sand above the casing, in which case a recementing job will be attempted. The well is an offset to Magnolia Petroleum Co.'s No. 1 Labbe, a gas producer.

Live Oak County

In Live Oak County, two wildcats were apparently approaching completion. Mills Bennett Production Co.'s No. 1 Watson and Shipp, in the Pablo Sabinas Survey north of the Dinero Field, showed oil at 4,700 feet. The casing was perforated at this depth and the test showed about 300 feet of oil in 10 minutes. This production is believed to be in the Conroe horizon. J. O. Whittington's No. 2 Henrietta Little, on the M. M. Shipp Survey No. 788, north of the McNeill Field, showed 330 feet of oil on a drill stem test. The well is expected to be a good producer, the first to produce from the Pettus sand south of the Pettus area in Bee County. J. O. Whittington's No. 1 Little, 1,500 feet from No. 2, did not make a producer although it showed in the Hockley, Pettus and Conroe horizons.

Bexar County

In Bexar County, the two wildcats are proceeding according to schedule. E. H. Dunham and McClure's No. 1 San Antonio Sewer Pipe Co., east of Elmendorf, is drilling in the Taylor marl below 1,950 feet. The well is to be an Edwards lime test. Mid-Tex Production Co.'s No. 1 Walker is in the Glenrose lime at 1,520 feet. A show of gas was made in this well at 1,240-52 feet. It is to be a Trinity sand test.

Bee County

High gas pressure from a 4-foot sand at 5,810 feet has George M. Church's No. 1 Wood, a wildcat in Bee County, at a standstill. The sand was encountered unexpectedly, and an attempt made to core it. However, with the core barrel within 60 feet of the bottom, the high pressure made it impossible either to raise or lower the string without risk of losing control of the well. Weighted mud is being pumped into the hole, but the effect on the pressure is hardly noticeable.

Dirks and Ray

Completions and new locations ran high in the Dirks and Ray Fields during the week, with four wells coming in in the Dirks Field and one in the Ray. The activity will be shifted to new locations and wells now drilling. Another producer was added to the Dinero Field this week with the completion of Smith and Storey's No. 1 Sparks. The well, in the Jane Curry Survey, showed an initial production of 250 bbls. per day through a quarter-inch choke. Production is from sand at 5,203-16 feet. The well will be shut in for storage.

Wilshire Case Up Soon

LOS ANGELES, Calif., Aug. 19.—The petition of the Wilshire Oil Co. to restrain the State of California from interfering with its production activities in the Huntington Beach Field will come up in the Superior Court at Santa Ana on August 26. The temporary restraining order issued by the court a few weeks ago was amended so that state officials might enter upon Wilshire's properties to open tanks to permit the shipment of oil. The Wilshire Oil Co. contends that the allowable production of the Huntington Beach Field was established by the Central Proration Committee and Umpire Pemberton and that the state does not have authority to padlock its wells for violation of curtailment.

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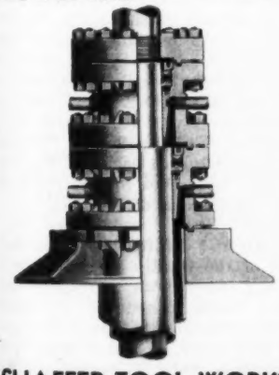

SHAFFER TOOL WORKS
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EXPORT—Oil Well Supply Co.

Among Gulf Coast Drilling Contractors

Allen & Morris of Laredo have one rig running for United Production Co. in Brooks County which is drilling below 4,000 feet on a 6,500-foot test; are rigging up on the John Dinn ranch in Duval County to make a 3,750-foot test for themselves; have one rig running for the Simms Oil Co. in the West Tuleta Field, Bee County; have a second rig running in the same field on the Campbell lease for the Simms Oil Co.; have set casing at 3,700 feet in the North Pettus Field for the Begol Oil Corp.; and are waiting on a new location in the Loma Alta Field, Duval County.

Trinity Drillers of San Antonio are reconditioning a well for the Carolina-Texas Oil & Gas Co. in Webb County, having cleaned the hole of 3,000 feet of drill stem with a cutting tool on bottom; are drilling a 5,000-foot test for Mills Bennett on his Dinero block in Live Oak County; have completed a well for the Continental Oil Co. on the Driscoll ranch in Duval County, and are rigging up to drill well No. 6-A nearby; are drilling a well for Rogers Oil & Gas Co. of Oklahoma City on Survey 118 in Duval County; are drilling a well for the Kemron Oil & Gas Co. of Ohio in Section 26, Zapata County; and have abandoned Magnolia Petroleum Co.'s No. 6 on the Seeligson ranch at 7,135 feet.

Jordan Drilling Co., Houston, is drilling a 4,000-foot test near Shiro in Grimes County for themselves and Dave Wallace and others.

Alamo Drilling Co. is drilling and coring below 6,200 feet on a Marginulina test near Danbury, Brazoria County, for Turnbull & Irwin, Shell Petroleum Corp., and themselves.

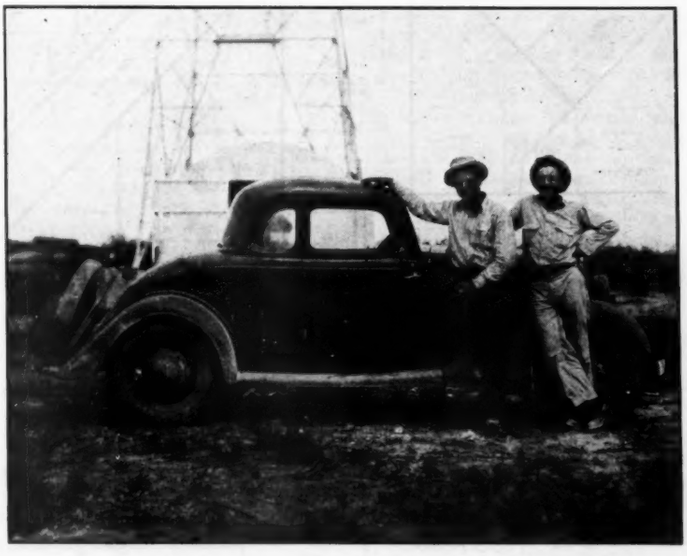
Edwards Drilling Co. is drilling below 7,500 feet on a well for Pure Oil Co. at Dickinson; is drilling below 6,000 feet on a well for Jefferson Lake Oil Co. near Abbeyville, La.; and has plugged back preparatory to perforating a well for Moretex Oil Co. in the Placedo Field.

George Echols is deepening to the Oligocene on a well for Uscan Oil Co. at Manvel; has completed a workover for 19 bbls. an hour through a seven-thirty-seconds inch choke for the Windsor Oil Co. at Manvel; has spudded a well for the Sun Oil Co. at Government Wells; and has set 826 feet of surface pipe in a well for the Sun Oil Co. at Placedo.

C. & C. Drilling Co. has completed No. 4 Watt for the Gem Oil Co. at Livingston, and is moving rig to drill No. 7 Davis Holmes in the same field for the same operators. The company is also moving in to drill No. 2 Maco Stewart, 660 feet west of No. 1 Maco Stewart, for the Coast Petroleum Co. in the Dickinson area, Galveston County.

Rutherford Drilling Co. has two rigs running for the Skelly Oil Co. at Van Vleck; one rig running for Skelly Oil Co. in the Sam Fordyce Field; and one rig running for Phillips Petroleum Co., now below 5,400 feet, in the Vanderbilt Field.

Cron & Gracey are moving a rig at Barbers Hill to drill a well for Sinclair Prairie; have three rigs running at South Houston for Stanolind Oil & Gas Co.; have one rig running for Texas Co. at Manvel; one rig running for the Barnsdall Oil Co. at Placedo; one rig running at Blue Ridge for the Sinclair Prairie; one rig running at Eunice, New Mexico, for Sinclair Prairie; one rig running in East Texas for British American Oil Co.; and one rig running at White Castle, La., for Shell Petroleum Corp.



Seventeen miles into the mesquite brush from Freer, Duval County, reached by a pipe line trail, is Loma Alta, where Allen & Morris, Laredo drilling contractors, recently completed a well for the Humble Oil & Refining Co. In the picture above, W. J. Paris (left), tool pusher for Allen & Morris, is seen with E. H. Lassiter, trucking contractor of Freer. Allen & Morris have five rigs running in Southwest Texas at this time.

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Texas and Louisiana Gulf

ACADIA PARISH GAS WELL IS PRODUCING 38 GRAVITY OIL

By
F. L. SINGLETON

HOUSTON, Tex., Aug. 19.—Continental Oil Co.'s No. 1 Ortego, a wildcat test located in northwestern Acadia Parish, Louisiana, which was proven for gas production two weeks ago, was converted into an oil well the latter part of the week after being deepened from 8,308 feet to a total depth of 8,315 feet. While cleaning itself through a one-eighth inch choke, with the tubing pressure 2,200 pounds and the casing pressure 2,000 pounds, it was flowing an estimated 300 bbls. of fluid per day of which 60 per cent was 38 gravity oil.

On 8,000-Acre Block

Five feet of screen was set at 8,315 feet, and the 8 feet of sand from 8,300 to 8,308 feet that tested an estimated 15,000,000 feet of gas with some distillate on two previous production tests was blanked off and eliminated the excess gas pressures that ranged as high as 2,900 pounds.

The well is located in Section 28-7s-2w, 6 miles northwest of the town of Iota, and is situated on a block of approximately 8,000 acres which was taken up last year after the company had worked the area by seismograph reflection shooting.

Production is from the Frio sand that produces in the majority of the deeply seated fields along the coast, namely the Roanoke Field in Jefferson Davis Parish, Dickinson in Galveston County, Old Ocean in Brazoria County and several others. The Discorbis was topped at 6,710 feet, Heterostegina at 7,100 feet and the Marginulina at 7,543 feet. The gas sand was encounterd at 8,275 feet and the oil sand at 8,300 feet.

Prepare to Test Offset

In the Bayou St. Dennis Field, Jefferson Parish, the Texas Co. is preparing to run casing in its No. 1 Rigolet Co-operative Fur Co., a south offset to its No. 1 Bayou St. Dennis, the discovery well which is producing from the lower Miocene sand bottomed at 9,572 feet. Oil sands have been cored from 9,540 to 9,568 feet, the total depth, and after an electrical coring test is made of the hole casing will be cemented preparatory to testing. Location is in Section 30-17s-24e. Northwest of the discovery, the company's No. 2 Bayou St. Dennis is drilling in hard lime below 9,136 feet.

Since the completion of the Ortego test in Acadia Parish, attention in Coastal Louisiana is being centered on the Superior Oil Producing Co.'s No. 1 Duplanter-Community, wildcat test, in Section 65-7s-1e. Several showings of oil are reported to have been encountered from 6,900 to 7,745 feet, but after the operators cemented a protection string of 9⅝-inch casing at 7,744 feet, hole is being carried deeper and is below 7,802 feet.

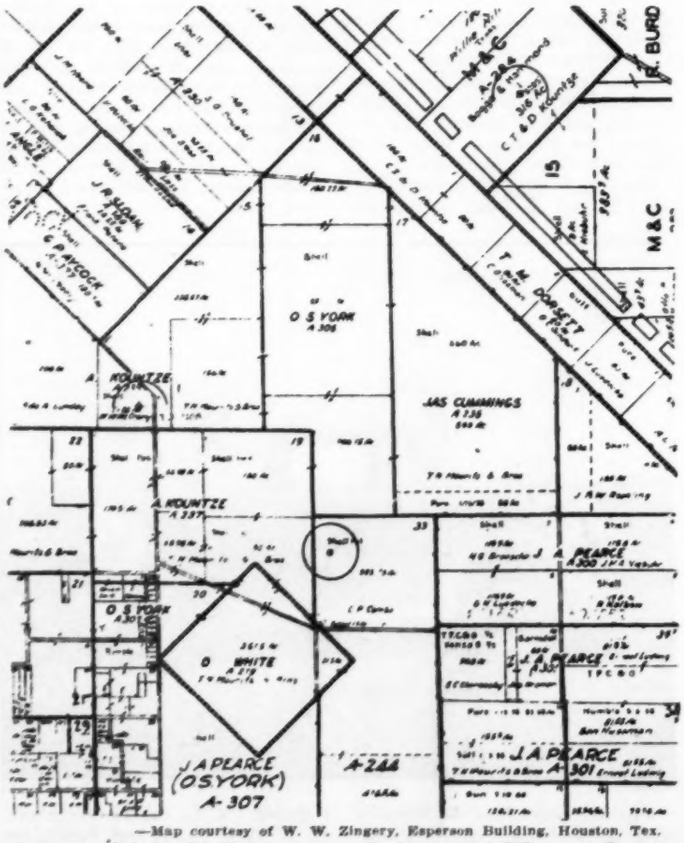
One of the best producers to be completed in the Choctaw Field, Iberville Parish, was made by Standard Oil Co.'s No. 7 Myrtle Grove, which was completed for an initial production of 53 bbls. per hour through a three-eighths inch choke with tubing pressure 560 pounds. It is bottomed in sand at 4,154 feet and is located in Section 52-9s-11e.

In St. Martin Parish, the Texas Co. has made location for its second wildcat test, No. 1 State in Lake Mongoulois, located 5,180 feet east and 350 feet north of the SE cor. of Section 10-10s-9e. It is south of the company's Henderson prospect on which the company is drilling below 8,501 feet in shale and lime on its No. 7 St. Martin Land Co. in Section 17-8s-7e.

Roanoke Field

More attention was given the two deep tests in the Roanoke Field, Jefferson Davis Parish, which are coring below 10,000 feet, when Humble Oil & Refining Co.'s No. 1 Thomas Nelson attempted to blow out at 10,570 feet and the operators have shut down to condition the mud before coring ahead. It is located in Section 11-9s-4w, and is the latest well to encounter excessive gas pressures below 10,000 feet. The other deep test is Shell Petroleum Corp.'s No. 1 Jarnigan located in Section 12-9s-4w that is coring in hard shale below 10,418 feet. Sand with oil and gas odors were encountered last week from 10,313-17 feet.

Three producers and one abandonment were marked up for the Bosco Field in Acadia and St. Landry Parishes. In Section 35, Superior Oil Producing Co. completed No. 5 Isringhauser for an initial production of 273 bbls. per day from a total depth of 8,709 feet. In the same section its No. 10 Larcade made 269 bbls. per day from a total depth of 8,690 feet. On the south side of the field in Section 34, No. 3 Prejean was completed at a total depth of 8,607 feet for an initial production of 429 bbls. per day. Approximately 2,000 feet south of production in Section 34 the company's No. 1 Benoit was abandoned at 8,645 feet.



—Map courtesy of W. W. Zingery, Esperson Building, Houston, Tex.

A section of the Midfield area in Jackson and Wharton Counties showing Shell Petroleum Corp.'s No. 1 Coombs in Jackson County which showed for a possible pool opener on a drill stem test. Two dry holes to the northwest and northeast are indicated by half circles

The activity in this field has slowed up considerably within the past few weeks and production has declined from 21,000 to 15,000 bbls., which is probably due to the operators reducing the size of the choke, in an attempt to curtail the encroachment of more salt water in several of the wells that are producing from the Discorbis. The majority of the edge wells that are producing from the Discorbis have shown some salt water when first completed, but the amount has increased considerably within the past few weeks.

Along the Texas Coast

Along the Texas Coast, the outcome of a production test scheduled to be made on the wildcat test of Shell Petroleum Corp.'s No. 1 Coombs in the Midfield area of Jackson County, was awaited at the close of the week. The test made its appearance as a possible pool opener last week, when it tested 15 thribbles of oil on a drill stem test from 5,634-42 feet and built up 110 pounds of pressure. It topped the Frio sand at 5,627 feet and is bottomed at a total depth of 5,650 feet, with 7-inch casing cemented at 5,630 feet.

It is located 466 feet east of the west line and 2,500 feet north of the south line of a 242.75-acre tract in Section 33 of the Morris and Cummings Survey, and is 6 miles southwest of the Louise Field in Wharton County. While it is bottomed at the approximate depth of the wells in the Louise Field, it is being looked upon as a new field, since the two areas are separated by a dry hole abandoned below 6,000 feet. Northwest of the present test the same company recently abandoned its No. 1 Coobs at 7,408 feet, although it tested 525 pounds of pressure and a small mount of distillate in the same sand as the Coombs test.

South Houston District

Stanolind Oil & Gas Co.'s No. 1 First National Bank, the second well to be drilled in the South Houston district, is bottomed in shale and sand showing oil from 4,656-88 feet and was preparing to make a drill stem at the end of the week. It is north of the discovery well about 1 mile in the Callahan and Vince Survey. The company has plugged back the discovery well to 4,831 feet to straighten the hole before it is drilled deeper.

J. W. Frazier and others' No. 2 Lynott and Buffum, the discovery well of the Hardin Field in Liberty County, showed an increase in salt water when tested on a 24-hour gauge. Flowing through a one-quarter inch choke, it gauged 269.29 bbls. of fluid of which 17.49 per cent was salt water, which is an increase of approximately 9 per cent over last week. The gas-fluid ratio was 539

to 1 and the gas-oil ratio was 650 to 1, with the tubing pressure 430 pounds and the casing pressure 1,775 pounds. Although the acreage around the well is held by numerous companies, no new locations have been announced for the field.

Montgomery County

Two more wildcat locations were announced for Montgomery County. In the extreme northeastern part of the county the Amester Drilling Co. has the derrick up for its No. 1 T. S. Foster, located 1,282 feet north of the south line and 754 feet east of the west line of Block 45 in the J. M. De La Garza Survey. Northwest of the dry hole drilled by Woodard-Smith and Cooper's No. 1 J. V. Scott in the Frances Wheeler Survey, William Thompson has made location for No. 1 J. V. Scott.

More information on what might be expected of wells drilled on the west and southwest sides of the Hastings Field, northeastern Brazoria County, was revealed by the encouraging showing being made by Stanolind Oil & Gas Co.'s No. 1 Pennock in the H.T.&B. Survey No. 36. It is coring in oil sand below 5,910 feet and is assured of making a producer. Based on the first oil sand encountered at 5,333 feet it is several hundred feet higher than the company's No. 1 Hutchinson, located to the southwest, and is 200 feet higher than its No. 1 Grote, located over 2,000 feet due east, consequently production is expected to extend over a wide area in this direction. The showing made by the test has no doubt been instrumental for the location made by Humble Oil & Refining Co. for its No. 1 G. C. Cannon, located 330 feet north and 330 feet west from the southeast corner of a 60-acre lease, which is only about 1,000 feet from the Droegemeyer lease in the most extreme northwestern part of the H.&T.B. Survey No. 36.

Wharton County received its third active wildcat test when Pure Oil Co. made location for its No. 1 Paige, situated on the company's Blue Basin block. It is located 1,397 feet northeast and 467 feet southeast from the west corner of 159.27-acre lease in the James Pirie Survey. In the extreme northeastern part of the county, Sterling Oil & Refining Co.'s No. 1 Janik, located in the Jonathan Scott Survey, is drilling in shale below 5,620 feet. The Vicksburg was topped at 5,163 feet and the Warreni at 5,192 feet. The other wildcat test is Navarro Oil Co.'s No. 1 Schellman, in the Nasario Mancha Survey, which is drilling below 2,000 feet in shale.

Anahuac Field

In the Anahuac Field, northern Chambers County, Humble Oil & Refining Co.'s No. 1 Engels, an outpost test northeast of production in Section 50, H.&T.C. Survey, is drilling in shale and lime below 6,121 feet. Based on top of the Discorbis topped at 5,898 feet it is 77 feet lower than the company's No. 3 Middleton, about a mile southwest, which is the highest well in the field. Since the Middleton test encountered 270 feet of oil sand, the dip between the two tests is not expected to be great enough to keep the Engels test from producing. However, it changes the structure of the field considerably and production may not extend in this direction as far as first expected. Several other interesting outpost tests mentioned last week have gotten under way and will be watched closely.

At the Dickinson Field, Galveston County, Humble Oil & Refining Co.'s No. 6-A Maco Stewart, the most southerly test in the John Sellers Survey, attempted a drill stem test from 8,039-74 feet, but the seat gave way and the operators recovered only 3 thribbles of gas cut mud. It is coring ahead in shale with streaks of sand below 8,094 feet. The first well to be completed on the State River bed lease is scheduled to be tested during the week when Stanolind Oil & Gas Co. drills the plug on its No. 1 State, which is bottomed at 8,115 feet with 7-inch casing cemented at 8,113 feet. It topped the Discorbis at 6,130 feet, Heterostegina at 6,895 feet and the Marginulina at 7,235 feet. Based on the latter marker it is a few feet lower than Humble Oil & Refining Co.'s No. 1 Jones, which offsets the test to the north. Pure Oil Co.'s No. 1 Shelor, due north of its No. 1, a distillate producer in the B.B.B.&C. Survey, is drilling in shale below 7,420 feet. It topped the Discorbis at 6,094 feet, Heterostegina at 6,954 feet and the Marginulina at 7,314 feet. Based on the latter marker it is over 200 feet lower than No. 1 Shelor.

Central West

Signs Point to Resumption of Drilling in Tiffin District

By GEORGE A. WHITNEY

FINDLAY, Ohio, Aug. 19.—Resumption of drilling operations in Eden Township, Seneca County, Ohio, is foreshadowed by activity of nonresident oil men, who are reported to be signing leases. This township, formerly one of the most productive in the county and referred to as the Tiffin Field, now has only one producing well. There are 595 producing wells in the county.

Few completions were reported in the Lima, Central Ohio, Indiana, Illinois, Kentucky and the Central West. Much leasing is being done in these fields and hopes of adding new producing territory are expressed.

In Hardin County, the Kento Gas & Oil Co.'s No. 1 on the Frank Hamilton farm, Section 17, Pleasants Township, is a light gas well at a depth of 1,336 feet. Jupiter Oil Co. is starting a well on the George A. Mathews farm, Section 18, same township and county. In Goshen Township, same county, T. E. George & Co. has a rig in for No. 1 on the Bert Thompson farm.

Peninsula Oil Co. is drilling a test on the James Ellithorp farm, Section 25, Catawba Township, Ottawa County, and if this proves a commercial producer of either oil or gas it will bring about further testing in Ottawa County, where little test work has been done in late years.

In Wyandot County, Murphy and others' No. 3 on the Mary Chaney farm, Section 8, Tymochtee Township, was a dry hole at 1,538 feet. Veont & Co. are drilling below 1,200 feet in No. 1 on the W. M. Framer farm, Section 19, Crane Township, same county.

In Putnam County, Brown and others are drilling around 1,000 feet on the B. Geirhart farm, Section 23, Blanchard Township.

CENTRAL OHIO

In Lorain County, Schneider & Wyles' No. 3 on the A. L. Mills farm, Section 6, Ridgeville Township, is a gas well in the Clinton lime at 2,492 feet, producing 1,600,000 feet.

In Perry County, Ohio Fuel Gas Co.'s No. 1 on the Irene and William Stoner farm, is a gas well in Section 5, Reading Township, at a depth of 3,069 feet. Perry Sturm has a rig up for No. 2 on the E. L. Vansickle farm, Section 5, same township. Caywood-Mid-East Gas Co. has a rig up for No. 2 on the Homer Caywood farm, Section 11, same township. Hopewell Oil & Gas Co. is drilling No. 5 on the Michael Emmert farm, Section 9, same township.

In Cuyahoga County, Ohio Fuel Gas Co. is drilling No. 1-5,999 on the Ralph W. Frank farm, Lot 37, Strongsville Township, below 1,400 feet. J. W. Cushing is drilling below 2,000 feet on the Aluminum farm, Lot 291, Newburg Township, same county.

In Ashland County, Ohio Fuel Gas Co. is drilling below 1,720 feet in No. 1 on the Clarence Kline farm, Section 16, Orange Township. McConnell & Co. is drilling No. 5 on the A. J. McClure farm, Section 10, Lake Township, same county.

In Stark County, East Ohio Gas Co. shut down at 300 feet in No. 4 on the Howard Fawcett farm, Section 17, Jackson Township. Same company is reported at 2,750 feet in No. 2 on the D. and M. Braucher farm, Section 10, same township. Same company is moving in drilling tools for No. 1 on the G. and E. Whetstone farm, Section 13, same township. White & Lyons are fishing for lost tools in No. 1 on the J. and L. Deetz farm, Section 21, Jackson Township. Obermiller & Co. are spudding in on the O. H. Rose farm, Section 5, same county. East Ohio Gas Co. has a rig in for No. 1 on the M. D. Smith farm, Section 3, Plain Township. Dewant & Louden are fishing for lost tools in No. 1 on the Charles C. Weirough farm, Section 7, Osnaburg Township, at 375 feet. White & Co. are drilling below 3,400 feet in No. 2 on the Jacob Isler farm, Section 25, same township. Wiser Oil Co. has a rig on the Ralph Shaffer & Co. farm, Section 5, Pike Township.

In Holmes County, Lydick Oil & Gas Co. has a rig up for No. 2 on the Gladys McDowell farm, Section 26, Monroe Township. In Richland Township Hulse & Tedlow are drilling below 2,600 feet in No. 1 on the Paul J. Blanchat farm, Section 12.

INDIANA

Indiana is making a fairly good showing for an area where so many wells have been developed in the past few years, with still plenty of territory to maintain activity with the drill. In Spencer County the Staves Drilling Co.'s No. 2 on the Raymond Bretz farm, SE SE Section 33, Ohio Township, had an initial of 20 bbls., and No. 3 on the same farm, produced 15 bbls. initial. In Hupp Township John and Porter Wynn's No. 1 on the William Racine farm, was a dry hole. On the David Painter farm the Big Four Oil & Gas Co.'s No. 1 is shut down. Ohio Oil Co. is drilling No. 1 on the W. H. and Emma Raaf farm, NE SW Section 19, Huff Township. V. S. Hollingsworth is drilling No. 1 on the John Hoinzo farm, NW SE Section 6, Anderson Township. Petroleum Exploration Co.'s No. 3 on the Lorenz Balback farm, produced 5 bbls., and No. 5 was a 5-bbl. producer, while No. 4 on the same farm, was a dry hole and No. 6 is drilling.

In Vanderburg County, the Vanderburg Oil Corp. is drilling No. 9 on the George Hornby farm, SE SE Section 32, Center Township. In Carter Township the Petroleum Exploration Co.'s No. 5 on the Lorenz Balback farm, SW SE Section 25, was a gas well and No. 6, same farm, is drilling.

In Posey County, W. W. Johnson's No. 1 on the Barbara Grotius farm, SW SW Section 13, Smith Township, was a dry hole.

In Sullivan County, W. A. Sage is drilling No. 1 on the Gessie Eads farm, Section 6, Cass Township.

KENTUCKY

In the Fordsville area of Ohio County, Kentucky, nine completions were reported, of which five were oil wells, with an initial of 125 bbls., one gas well, and three dry holes, which is a fair average.

W. E. Hupp & Co.'s No. 2 on the J. L. Bellamy's 16 acres in the Fordsville area produced an initial of 30 bbls. Kentucky Natural Gas Co.'s No. 11 on the Nannie Rogers and others farm in the Deanfield area of Ohio County, produced 45 bbls. initial. Orville Whitehouse's No. 2 on the Orville Whitehouse farm, 3 miles south of Fordsville, produced an initial of 25 bbls. Inland Oil & Gas Co.'s No. 1 on the Tom Escridge farm, was a dry hole. Same company's No. 1 on the Archie Rhoads farm was a gas well.

Stewart & Galey's No. 15 on the J. H. Roberts farm, in Ohio County, produced an initial of 15 bbls. Snowden-McSweeney's No. 2 on the Almeda Brown farm, a mile south of Fordsville, produced 10 bbls.

Petroleum Co.'s No. 1 on the T. Mills farm, was a dry hole, and S. R. Sirman's No. 1 on the F. Johnson farm was a dry hole.

Wells Abandoned

In Troy Township, Wood County, Ohio, D. J. Klingman abandoned Nos. 4, 6, 9, 10, 11, 12, 13, 14 and 15 on the Hillie & Linke farm, Section 13. In Allen County, H. F. Kelley & Co. abandoned No. 1 on the Mary M. Mosier farm, Section 25, Shawnee Township, and No. 1 on the T. P. Sellers farm, Section 30, Perry Township.

California Field Report

By
L. P. STOCKMAN

AMERADA BELIEVED TO HAVE DISCOVERED NEW GAS FIELD

LOS ANGELES, Calif., Aug. 19.—The Amerada Petroleum Corp. is believed to have discovered a new prolific dry gas field near Tracy in San Joaquin County as its No. 2 F.D.L. in Section 15-2-5 showed a potentiality of 35,000,000 feet of dry gas daily on a short test from 4,063 feet. The well was shut in immediately and it may exceed its initial production under more favorable conditions. The discovery of commercial gas production in this area is of special importance owing to its proximity to the San Francisco Bay region, which during the winter months requires approximately 225,000,000 feet of gas daily. Additional wells will be needed fully to determine the extent of the structure and its potentiality.

The Tracy gas field is approximately 70 miles east of San Francisco and 1 mile from the city of Tracy. At the present time gas for San Francisco, Oakland, and other bay cities, is moved northward from the North Dome of Kettleman Hills, Buttonwillow and Semi-Tropic Ridge. The gas from the Kettleman North Dome Field is of petroleum origin whereas the gas from Buttonwillow and Semi-Tropic is produced from zones that do not contain oil or natural gasoline.

The Amerada's No. 2 F.D.L. has a 9⅝-inch water string landed and cemented at 3,973 feet. Previous to completion a formation tester showed 17,000,000 feet of gas that had B.t.u. value of 1,250 heat units. The drill has passed the 6,500-foot level and the hole is to be carried down for a deep conclusive test. The company has leases on approximately 9,400 acres surrounding the discovery well and therefore will not be obliged to engage in offset drilling. The Standard Oil Co. has about 2,000 acres under lease about 10 miles from the discovery well. The Union Oil Co. had extensive holdings in this area a few years ago, but quitclaimed this acreage.

Kern River

The Republic Petroleum Co. has the further distinction of finishing a flowing well out on the west front of the Kern River Field in the current week, the first well finished under a natural flow in this district for years. It has been necessary to complete new wells out on the west front on the beam due to the lack of sufficient kick to result in a natural flow. The Kern River Field has a high hydrostatic head and in the case of a flowing well the oil is produced primarily as a result of water pressure. This was the case with the Republic Petroleum Co.'s new well, No. 3 Strassburger, which came in flowing 480 bbls. of oil daily from 2,109 feet after the hole had been finished with an 8⅝-inch liner carrying 289 feet of perforated. The company is rigging up No. 4 Strassburger preparatory to an early spud.

Completion of the Republic Petroleum Co.'s new well, in Section 24-28-27, has increased interest in this section of the Kern River Field. Operators have finished excellent producers in this district during the past several months. The Kern River Oilfields Co. is making preparations to finish its No. 4 in Section 25-28-27 within the next few days and will start work immediately on No. 5 in the same section. The first three wells finished by the company on this property registered excellent production. The Associated Oil Co. has completed No. 2 Premier fee in Section 4-28-27 and has new rigs going up for Nos. 3 and 4 on the same property.

Round Mountain

The Honolulu Oil Corp. added an excellent well to its list of producers in the Round Mountain Field of Kern County during the early part of the current week when No. 66 in Section 18-28-29 was brought in pumping 1,190 bbls. of 17.1 gravity daily from 2,012 feet after the hole had been plugged back from 2,079 feet. In Section 20-28-29 the company is making preparations for a production test on No. 1-A and commercial production is expected. No. 93 in Section 18-28-29 has just been spudded in and new rigs are going up for Nos. 62 and 78 in the same section. In the Mount Poso Field of Kern County, the Shell Oil Co. successfully completed No. 11 Vedder-Rail, pumping 290 bbls. of 16.2 gravity daily from 1,950 feet. Development work in the Mount Poso Field has shown an increasing tendency during the past several weeks.

The Standard Oil Co. finished an excellent well in the Mountain View Field of Kern County when No. 5 Ranton was brought in flowing 5,560 bbls. of 24.9 gravity and 4,160,000 feet of natural gas from 5,395 feet. This new well was finished with a 7-inch liner carrying perforations at 5,150-5,256 feet and at 5,276-5,391 feet and 5,099 feet of 3-inch tubing. The Shell Oil Co. is rigging up No. 2 Bahrenburg and No. 2 on Porter lease No. 2, preparatory to an early spud. The Union Oil Co. has staked a location for No. 2-B Kernco, 330 feet south and 330 feet west of NE cor. Section 21-30-28. The North American Consolidated Oil Co.'s No. 1 in the Midway Sunset Field of Kern County, Section 2-32-24, has been completed pumping 251 bbls. of 27.2 gravity daily from 4,296 feet. The Standard is putting the finishing touches on No. 105 in Section 11-32-23 and this new producer will be completed on the beam.

Inglewood

Two new wells were chalked up in the Inglewood Field during the current week and another, Standard Oil Co.'s No. 32 on Vickers lease No. 1, should be on production shortly. The new wells were Standard's No. 76 L. A. Investment and No. 17 Cone, which the Standard drilled as agent for the Shell and K. & I. Corp. No. 76 L. A. Investment was completed flowing 767 bbls. of 29.1 gravity daily from 2,800 feet after the hole had been finished with a 4¾-inch liner including 61 feet of perforated. No. 17 Cone, bottomed at 3,615 feet and finished with a 6⅝-inch perforated liner and an 8⅝-inch water string cemented at 3,550 feet, registered an initial daily production of 642 bbls. of 25.2 gravity. On the Rubel lease, of which the Standard finished an excellent well last week, preparations are under way to begin drilling two new wells.

Long Beach

Four new wells were completed in the Long Beach Field during the past seven-day period, but only one of them, Harlyn Oil Co.'s No. 2 Signal, registered relatively large production. This new well, bottomed at 4,158 feet and finished with a 6⅝-inch liner carrying 278 feet of perforated, was brought in on a compressor doing 776 bbls. of 25.6 gravity. Three of the four new wells finished this week required the use of compressors to effect production and one of the new wells was brought in on the beam. The Hillman Drilling Co.'s No. 1 Long Beach was completed on a compressor doing 174 bbls. of 21.5 gravity, cutting 9.9 per cent from 4,237 feet. The Bescos Oil Co. finished its No. 1 Signal on the beam, making 91 bbls. of 26.9 gravity daily from 3,903 feet. The Great Western Oil Co.'s No. 2 Long Beach, bottomed at 5,418 feet but plugged back to 5,095 feet, was finished on a compressor making 187 bbls. of 29.1 gravity daily.

The Union Oil Co. completed two new wells in the Santa Fe Springs Field of Los Angeles Basin and both registered commercial production. No. 28 Alexander, finished in the Bell zone at 3,691 feet, was brought in flowing 530 bbls. of 31.2 gravity and 970,000 feet of gas daily. No. 81 Bell, finished at 4,138 feet but plugged back to 3,875 feet, was completed on the beam pumping 241 bbls. of 31.6 gravity daily. Associated Oil Co.'s No. 8 Fowler, in the Huntington Beach Field, was somewhat of a disappointment upon completion at 3,657 feet after the hole had been plugged back from 3,727 feet, as the initial daily production, 81 bbls. of 22.4 gravity, showed a cut of approximately 30 per cent.

Montebello

The eastern extension of the Montebello Field is still an enigma and may remain so for several weeks. Drilling operations up to the present are rather perplexing owing to the

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	August 1		July 26			
	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Intercoastal-domestic:						
Fuel oil	.....	.....	.....	.....	.....	8,868,692
Diesel and gas oil	.....	.....	.....	.....	527,098	1,000,056
Gasoline	183,970	26,281	353,425	50,489	4,777,103	4,584,387
Kerosene	.....	.....	84,106	12,015	753,457	648,080
Asphalt	.....	.....	.....	.....	.....	70,019
Other finished oil	.....	.....	.....	.....	.....	54,778
Foreign exports:						
Crude oil	224,439	32,063	941,191	134,456	7,776,516	4,660,527
Fuel oil	.....	.....	60,217	8,602	7,311,018	7,589,204
Diesel and gas oil	.....	.....	46,668	6,667	2,641,016	2,687,300
Gasoline	398,368	56,910	66,974	9,568	3,589,505	2,428,969
Kerosene	.....	.....	.....	.....	813,478	1,168,991
Other finished oil	.....	.....	.....	.....	.....	3,529
Other unfinished oil	.....	.....	.....	.....	99,847	186,069
Coastwise-domestic:						
Crude oil	165,992	23,713	.....	.....	3,411,553	5,207,918
Fuel oil	129,608	18,515	246,737	35,248	5,676,444	5,346,349
Diesel and gas oil	12,078	1,725	45,429	6,491	597,529	424,560
Gasoline	48,921	6,989	409,249	58,464	6,349,554	7,098,273
Kerosene	.....	.....	44,840	6,406	121,980	97,173

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Intercoastal-domestic:						
Fuel oil	.....	.....	.....	.....	.....	110,650
Diesel and gas oil	.....	.....	.....	.....	157,258	448,112
Gasoline	.....	.....	.....	.....	.....	218,985
Kerosene	.....	.....	.....	.....	149,715	276,412
Asphalt	.....	.....	.....	.....	348,064	.....
Lubricants	.....	.....	.....	.....	35,172	26,500
Foreign exports:						
Crude oil	39,152	5,593	.....	.....	1,465,651	1,080,672
Fuel oil	19,818	2,831	28,761	4,109	1,253,800	1,171,641
Diesel and gas oil	.....	.....	.....	.....	731,609	879,681
Gasoline	238,240	32,606	.....	.....	1,911,189	2,026,215
Kerosene	.....	.....	.....	.....	483,712	630,644
Lubricants	.....	.....	.....	.....	136,389	108,580
Other finished oil	.....	.....	.....	.....	.....	2,760
Other unfinished oil	.....	.....	.....	.....	.....	5,750
Coastwise-domestic:						
Fuel oil	159,280	22,769	292,207	41,744	3,940,554	3,374,767
Diesel and gas oil	.....	.....	.....	.....	141,667	105,912
Gasoline	22,108	3,158	30,140	4,308	2,752,550	2,830,540
Kerosene	.....	.....	3,387	484	64,034	64,805

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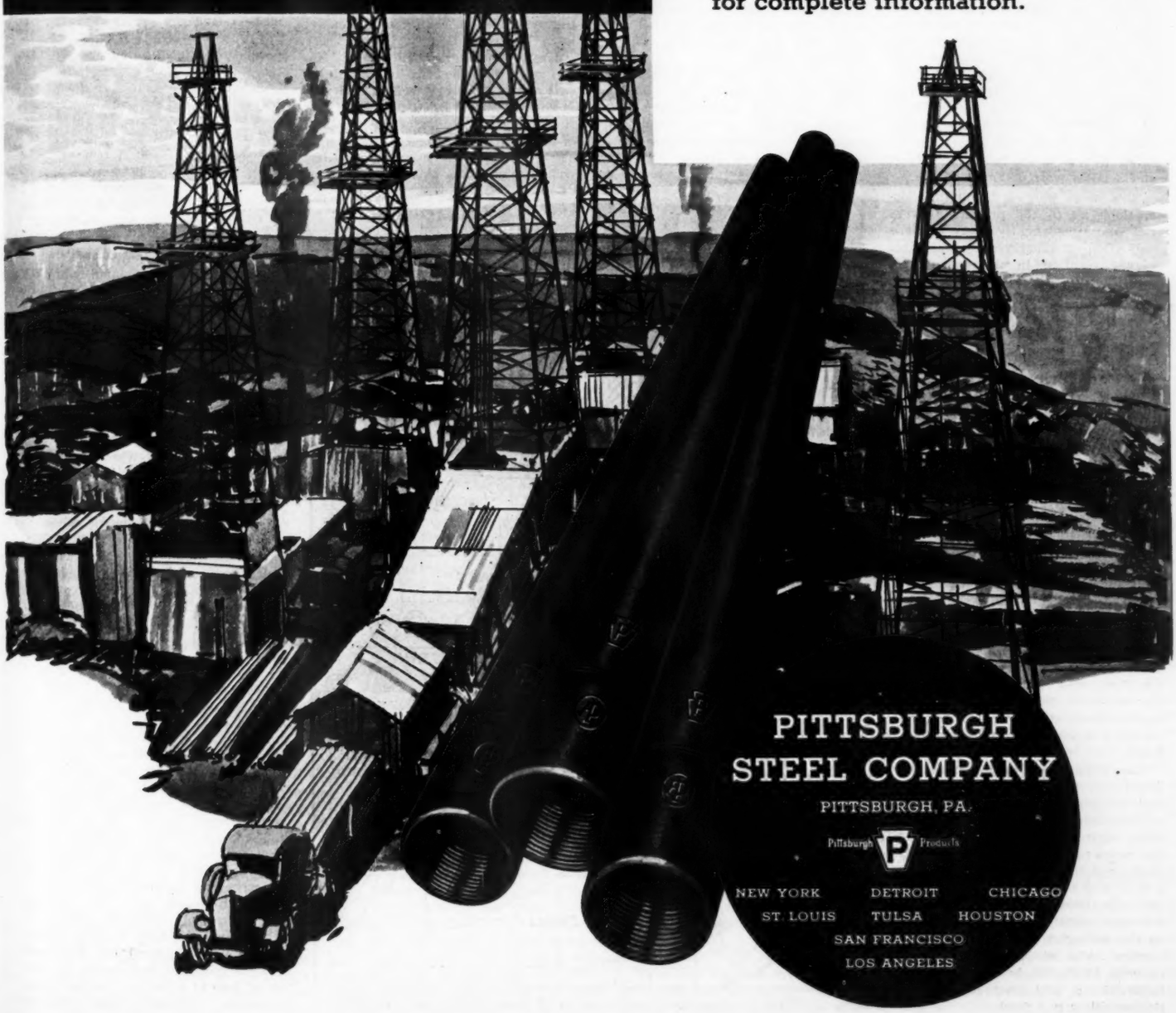

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inability of operators to correlate distinguishing markers with accuracy. Petroleum engineers are inclined to believe that faulting has created two different productive areas in the Montebello extension. This opinion appears justified in view of the disparity in the depths at which production is secured in the Woodward Oil Co.'s No. 1 Lapworth and other producing wells in this general area. The first ray of hope appeared early this week when correlation work revealed that the Universal Consolidated Oil Co.'s No. 1 Farmer is running approximately 200 feet higher structurally than the company's No. 2 Nutt. If this condition continues for another 1,000 feet, it would appear almost certain that this well will go a long way toward determining the trend of the structure.

Wildcat Operations

Up in the Santa Maria Valley the Union Oil Co. is making preparations to begin drilling another wildcat and a site has been selected on the LeRoy property in Section 16-10-34. This will be the fourth test of the Union in this locality. The first, No. 1 Rice, in Section 19-10-33, was a duster at 2,280 feet. No. 1 Moretti, in Section 24-10-34, the second test, proved good for 35 bbls. of 15.4 gravity daily from 2,389 feet. The Union's third test was No. 1 Enos in Section 23-10-34. This well was completed pumping 70 bbls. of 15.8 gravity daily from 3,372 feet after the hole had been plugged back from 3,472 feet. No. 1 LeRoy, scheduled to be spudded in shortly, is located a few miles north of Orcutt and 2 miles west of Santa Maria.

This area, judging by drilling operations up to the present, is very flat and consequently there is little indication of structure. A geophysical survey resulted in the decision to drill the new test on the LeRoy property. In addition to Union, the Hancock Oil Co., R. R. Bush Oil Co. and A. N. Macrate have extensive holdings in the area.

Buena Vista

The Shell's wildcat in the Buena Vista Lake district of Kern County is getting deep and the outlook at 8,265 feet is not any too promising. This well got some gas higher up in the hole but the company decided to carry it down in search of commercial oil production. The Ohio Oil Co.'s No. 2-A in the same area, Section 32-31-26, is rotating ahead at 4,251 feet and should be completed as a gas well unless the company decides to make a further deep test for oil. These two propspect wells are about 5 miles apart and may be on different structures. The Ohio drilled its first test as a geophysical shot and got a gas well. This geophysical survey indicated the existence of an unusually large structure extending for about 5 miles east of Buena Vista Lake.

The Texas Co. has acquired some potentially productive acreage in the Buttonwillow gas field of Kern County and rotary drilling equipment is being rigged up for an early test on the Sears property in Section 6-28-23. Milham Exploration Co. spudded in a new well on the Arlington lease in this same section a few weeks ago, but subsequently turned the well over to the Arlington Prop. Corp. A formation tester at 3,172-3,224 feet recovered 10,150,000 feet of gas. This looks like a new deep zone in the Buttonwillow gas field.

North Louisiana, Arkansas

TESTS AT RODESSA NEARING HORIZON

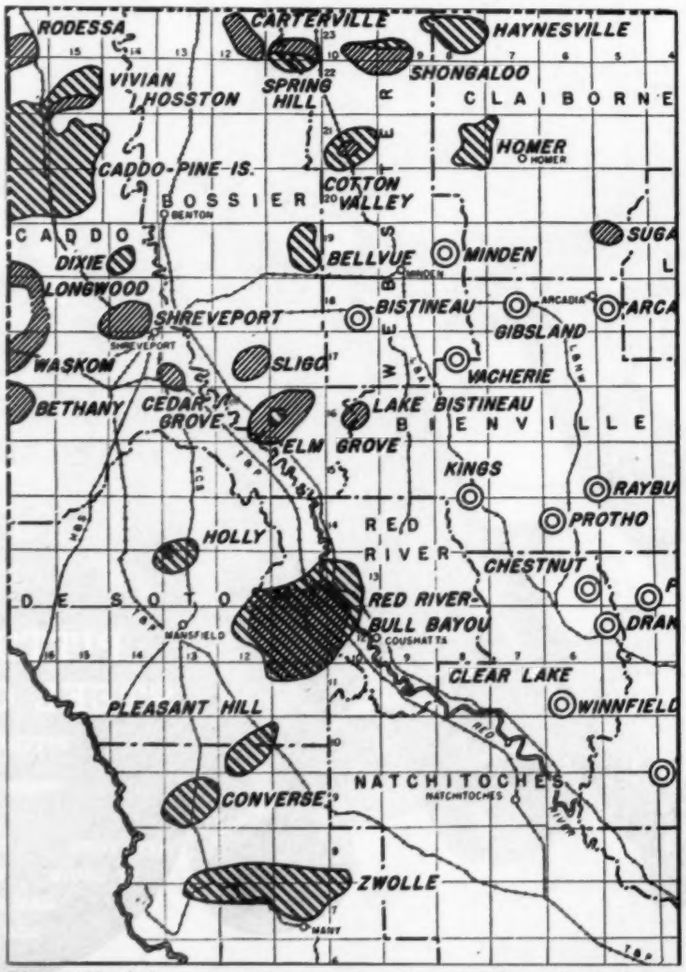
By
J. R. CRUMPTON

SHREVEPORT, La., Aug. 19.—The past week in the North Louisiana district proved to be a period of watchful waiting on further developments in the Rodessa Field. Eleven rigs are active in that area and a majority of them during the next seven days should reach the anhydrites above the Glen Rose horizon which is generally taken as the marker for checking the gas or oil possibilities in various parts of the field.

United Gas Public Service Co.'s No. 1 Young, Section 21-23-16, the discovery well, is flowing an average of 3,200 bbls. daily of 47 gravity oil into the tanks. Standard Oil Co. of Louisiana is running through 8-inch line to main line and the posted price is $1.03 per barrel.

One test has set 7-inch casing at 5,460 feet and should be completed within the next week. Leasing activity has subsided to some extent surrounding the Rodessa structure awaiting the outcome of drilling wells, but leasing and mineral purchases in other areas of Northwest Louisiana on the Sabine Uplift, notably Sligo, Cotton Valley, Shongaloo and Sugar Creek-Lisbon and other known structures still continues at fever heat. Numerous structures are getting a hot play from both major companies and independents on the probability of tests being drilled within the next year, there being no tests at this time in the immediate vicinity. The announcement of a deep test failure in Union County, Arkansas, condemned to some extent that particular area for deep production, but failed to dampen the plans of numerous operators to go forward with deeper drilling over a wide territory, particularly in Lafayette County.

Haynes Brothers Drilling Co.'s No. 1 Tyson, Section 24-23-16, 2½ miles east of the discovery well in Rodessa, is coring around 5,600 feet after setting the final string of casing. Top of anhydrites was logged in this well at 4,869 feet. The other 10 drilling wells are checking closely contacts on top and base of hard chalk and red beds but, as stated above, the anhydrite horizon is conceded to give a better check.



Map of North Louisiana showing oil and gas fields, and salt domes

Crude Oil Production

Estimated daily average production for week ending August 17 follows:

NORTH LOUISIANA

	Bbls.
Bellevue	600
Caddo light	7,960
Caddo heavy	2,045
Converse	1,255
Cotton Valley	420
DeSoto and Red River	1,425
Elm Grove	420
Haynesville	3,400
Holly	155
Homer	2,665
Pleasant Hill	170
Sarepta-Carterville	535
Urania	2,950
Zwolle	1,535
Total	25,535

SOUTH ARKANSAS

Champagnolle	2,315
El Dorado	2,255
Lisbon	320
Miller County	1,405
Nevada	870
Smackover light	2,290
Smackover heavy	18,115
Stephens	635
Urbana	2,100
Total	30,305

Townsite Possibilities

The Arkansas-Louisiana Gas Co.'s No. 1 J. S. Teamer, Section 13-23-16, three-quarters of a mile north and slightly west of Haynes' No. 1 Tyson and on the northeastern extremity of present drilling, is drilling below 4,000 feet and will be closely watched for the production trend in that direction. This test should prove or condemn the possibilities of townsite production within the limits of the village of Rodessa where numerous locations have been made on small tracts. Pelican Oil & Gasoline Co.'s No. 1 Sexton, Section 14-23-16, is another test that will mean much to townsite operators as well as United Gas Public Service Co.'s No. 1 Thomas Unit, Section 23-23-16, just outside the town limits. The former well is drilling at 4,250 feet and the latter at 4,022 feet.

Looks Like a Failure

Plain Dealing Syndicate's No. 1 Dodson, Section 25-23-13, in the northern part of Bossier Parish, seems doomed as a failure from the Blossom sand as a result of tests during the past week. A drill stem test from 3,050-92 feet was dry and the crew is coring ahead. As the surface elevation checks 49 feet higher than the same company's No. 1 King, Section 36-23-13, which was completed as a 5,500,000-foot gasser from 2,840 feet, the present test should have reached the pay level around 2,889 feet. In the northwestern part of Bienville Parish a closely watched wildcat, N. V. Duncan and others' No. 1 J. Miller, Section 9-18-7, topped the Nacatoch at 1,825 feet and is reaming to bottom of hole at 1,880 feet. Other North Louisiana wildcats follow: Bossier

Parish, Virgil Likens and others' No. 1 Palmer, Section 1-20-11, is moving in rig on a 5,000-acre block about 3½ miles southwest of nearest production of the Cotton Valley Field in Webster Parish. The test is a short distance inside the Bossier Parish line and is contracted to drill to 4,000 feet. Bossier Oil & Gas Co.'s No. 3 Sherrill, Section 13-19-12, northwest of the Bellevue shallow field, is drilling at 1,945 feet. In the western part of DeSoto Parish, north of the town of Logansport, M. L. Stephens and others' No. 1 Alston, Section 11-11-16, set 6-inch at 1,392 feet, tested dry at 1,405 feet and is shut down awaiting orders at 1,620 feet. Herman L. Brown and others' No. 1 Monstead, Section 10-17-4w, located on what is known as the Grambling structure in the southeastern part of Lincoln Parish, has resumed drilling from 1,250 feet. It is reported that this area is getting a hot play from lease and royalty buyers, one major company having taken a spread of 1,000 acres in the block and another having contracted for the gas rights provided it is a gasser and not an oil well. The Blossom sand looks good for production somewhere in this area, but the well will be drilled deeper if this horizon fails to pay off.

Eight Completions

The North Louisiana district reported eight completions consisting of three oil wells, three gas wells and two dry holes. All of the oil wells and two of the gas wells were in the old Caddo Field. Nick Babare's No. 2 Gibbs, Section 16-20-15, is pumping 30 bbls. daily from 2,204 feet; Shreveport Oil Corp.'s No. 5-B Muslow, Section 4-20-15, pumping 100 bbls. from 2,195 feet; the same company's No. 6-B Muslow, same section, is a 1,000,000-foot gasser from 2,165 feet; Simplex Oil Co.'s No. 7 Thomas, Section 15-20-15, is a 90-bbl. pumper from 2,202 feet, and Leonard Co.'s No. 1-G Muslow, Section 17-20-15, is flowing 500,000 feet of gas from the shallow depth of 821 feet. In Union Parish of the Monroe Field, United Carbon Co.'s No. 1 M. Schwab, Section 7-20-4e, had an initial open flow of 7,000,000 feet of gas from 2,142 feet. An East Carroll wildcat which has experienced many drilling troubles, Century Oil & Drilling Co.'s No. 1 Olive Dell, Section 56-21-12e, was dry and abandoned at 3,005 feet. Hawkins and Bird's No. I Scanland, Section 32-20-11, a shallow test northwest of the Bellevue Field, Bossier Parish, was abandoned at 499 feet.

ARKANSAS

The disappointment of the week in Arkansas was the failure of Gulf Refining Co.'s No. 49 Louis Werner, Section 5-16-16, a deep test on the western flank of the Smackover Field in Union County. The test was abandoned as dry in steel gray sand and granite at 7,973 feet. Seven-inch casing was set in the well at 6,224 feet and a drill stem test at 6,431 feet developed 3,000 feet of salt water through 2½-inch tubing. Salt rock was topped at 6,631 feet with the base at 7,488 feet. Top of anhydrites was logged at 7,541 feet below the salt rock, and top of first anhydrites and red shale was logged at 5,783 feet above the salt stratum. This is the second deep test failure in the Smackover area, Lion Oil Refining Co.'s No. 9-A Hayes, drilled to the east of the Gulf well a few years ago, was junked with drill stem stuck in the hole in salt rock at 7,255 feet. A third deep test, H. L. Hunt, Inc.'s No. 15 E. F. Gregory, Section 10-17-14, in the Rainbow Field, north and east of El Dorado, topped salt rock at 6,815 feet and was plugged back to shallow depth from a total depth of 6,911 feet. The Gulf test is the deepest yet drilled in the North Louisiana and South Arkansas area.

Several new locations on wildcat blocks in widely separated areas were announced in the Arkansas district. Erwin & Leach has staked location for their No. 3 Bodcaw in the NW cor. Section 20-16-23, Lafayette County. The test is located on what is known as the Stamps structure in the vicinity of the Balcones Fault, and will be drilled to 7,000 feet. In Dallas County, west of the town of Fordyce, John D. McCall and J. C. Kelly have derrick pattern on location for No. 1 Ray Owen in Section 26-10-16. Benedum & Trees, independent operators, have taken over an 11,000-acre block assembled by C. E. Harris and have made a tentative location in Section 4-17-5. The new test is about 7 miles northwest of Texas Seaboard Oil Co.'s No. 1 fee, Section 28-17-4, which is drilling in shale at 2,276 feet. It is also reported that Benedum & Trees are also planning an early test, probably to the 7,000-foot level on a large block of acreage in the southwestern part of Ouachita County, centering in Township 14s, Ranges 18 and 19w.

Other Arkansas wildcats follow: Calhoun County, the Hunter Co.'s No. 1 Stout Lumber Co., Section 33-16-13, set 12½-inch at 254 feet and drilling at 1,900 feet; Columbia County, J. G. Cubage and others' No. 1 Rhea, Section 12-17-22, west of the town of Magnolia, reached the contract depth of 3,500 feet and is temporarily shut down at 3,407 feet. Top of the red beds was logged in this test at 3,309 feet, and it is not known at this writing whether the test will be drilled deeper or abandoned at the present depth. In Ouachita County, McCullough Brown, trustee's No. 1 G. W. Rowe, Section 2-12-19, is shut down at 2,006 feet, and Snow Black Petroleum Co.'s No. 1 Bedford, Section 32-11-18, is arranging to drill 8-inch plug at 1,000 feet to test 3 feet of oil sand cored to 1,003 feet. Rockwell Development Co.'s No. 1 W. A. Smith, Section 13-11n-3e, Poinsett County, is drilling in hard sandstone at 1,116.

East Texas Border Counties

Numerous tentative locations have been made in Cass and Marion Counties as an aftermath of the Rodessa strike in Caddo Parish to the northwest, but to date no new operations have actually started. The test to hold the spotlight during the last few weeks is L. L. Blomgren's No. 1 Taylor, Payne Survey, about 14 miles northeast of Marshall in Harrison County. The test is now bottomed at 5,853 feet and has tested dry at various depths. It is stated by the operators that the hole may be deepened after a checkup with Rodessa area.

Completions and Operations in New York-Pennsylvania Gas Field

By R. C. CONINE

COUDERSPORT, Pa., Aug. 19.—New York and Pennsylvania shared honors for large producers in the Oriskany gas sand area in the week ending August 16. Belmont Quadrangle Development Co. completed a well on the Van Copen & Whiteman farm for 33,000,000 feet a day at a depth of 4,758 feet. The test, one of the best in the Willing Township, Allegany County district, developed trouble, however, when the tools were blown up in the casing to within 1,200 feet of the surface. The drill had gone 4 feet into the sand. Another New York completion was that of N. R. Kneass' No. 2 Owens, Camden Township, Oneida County, gauging 200,000 feet at a total depth of 1,305 feet. In Pennsylvania L. G. Stocum, A. C. Shoop and others completed the test on the L. Thompson farm, Genesee Township, Potter County, for 32,000,000 feet at a depth of 5,037 feet, 10 feet in the sand.

Pennsylvania Operations

Potter Development Co. got the first producer on the Sabinsville anticline when the Ray French farm well, Clymer Township, Tioga County, Pennsylvania, was gauged for 6,000,00 feet at a depth of 4,620 feet. The rock pressure is 2,115 pounds and it is expected that drilling will be continued to increase the flow. Penn United is drilling at 770 feet on the C. Wainwright farm, Lawrence Township, Tioga County. Cowanesque Natural Gas Co. is drilling at 5,450 feet on the E. A. Furman farm, Allegany Township, Potter County.

Hanley & Bird are drilling at 4,830 feet on the George Burd farm, Allegany Township, Potter County. The Tully was reached at 4,685 feet. Sylvania Natural Gas Corp. is casing at 5,163 feet on the Merle A. Hill farm, Genesee Township. Wyoga Oil & Gas Co. is drilling at 5,300 feet on its No. 3 Tassel, Hebron Township, same county. Godfrey L. Cabot, Inc., is drilling at 1,900 feet on the A. G. Lyman farm, Ulysses Township, and at 4,247 feet on the Robert R. Lewis farm, Allegany Township, United Producers is drilling at 4,930 feet on its No. 2 Katherine Curry, same township and county.

Penn York is drilling at 3,750 feet on the William Cobb farm, Allegany Township, Potter County. Potter Development Co. is drilling at 3,546 feet on the F. Robbins farm, Bingham Township, Potter County. New York State Natural Gas Co. is drilling at 3,220 feet on the A. Bishop farm, Allegany Township, same county. Sylvania is drilling at 1,790 feet on its No. 4 James.

New York Operations

Trumbull and others are shut down at 1,000 feet on the W. B. Lasher farm, Throop Township, Cayuga County. Southwestern is drilling at 4,285 feet on the T. Moran farm, Shrack and others are drilling at Alma Township, Allegany County 4,180 feet on the M. M. Loring farm, Willing Township, same county. Sanderson and others are shut down at 3,186 feet on the Leon Bennett farm, Granger Township, same county. Godfrey L. Cabot, Inc., is drilling at 550 feet on the A. Cunningham farm, Willing Township, same county, and is rigging up on the Dora Barber farm. Becker and others are rigging up on the Burns farm, Alma Township, same county. Wyoming Natural Gas is shut down at 1,783 feet on the C. H. Caulling farm, York Township, Livingston County. Hanley & Bird are rigging up on the M. Ackley farm, Greenwood Township, Steuben County. John Seton and others are drilling at 1,040 feet on the M. Youskiewies farm, Rome Township, same county. Godfrey L. Cabot, Inc., is drilling at 670 feet on the Aikens farm, Lewis Township, Lewis County.

Bolivar District Oil

Thirty-two strings of tools are in operation in the Bolivar district as follows: Hughes Brothers, fee, Genesee Township; Sawnett Oil Co., Burdick farm, Salt Rising Township; Forest Oil Co., one on Reed farm and one on Smyth farm, Bolivar and Wirt Townships, respectively; Bradley Producing Corp., two on Griffin farm, Wirt Township; Gilligan & Dermitt, Kossuth Township; Trio Oil Co., Wetherby farm, Phillips Hill; Shaner & Dermitt, Howe farm, Phillips Hill; W. E. Sawyer & Co., two on Olive Street lease, Bolivar; B. H. & S., fee, Richburg Hill; Tress Oil Co., Northrup lot, Bolivar; J. A. Wilber, Northrup lot, Bolivar; Otto Oil Co., Cawley farm, Bolivar; Sloan & Zook, six wells on Lot 8, Willets estate, Salt Rising district; E. J. Slingerland, Jordan farm, Jordan Hill; Karl & Weller, fee, Jordan Hill; Andrews Brothers, Nelson farm, Bolivar Township; George Birtcil, Harwood farm, Richburg Hill; John Fay, fee, Richburg Hill; Messer Oil Co., Moses lot, Richburg Township; Allentown Oil Co., Vosburg farm, Bolivar; Marsh Oil Co., three on Fay farm, Phillips Hill.

Savings in Motor Tax

Substantial savings of motor vehicle tax funds have been effected in Minnesota by the State Highway Department through the use of low-cost bituminous paving instead of more expensive materials. Last year the state constructed 143 miles of bituminous highways at an average cost of $6,330 a mile. This compares with the usual costs of about $20,000 a mile for more expensive types of paving. The average cost of the base preparation used on the low-cost roads constructed during 1934 was $2,060 a mile, while the average cost of the wearing surface was $4,270. Maintenance bituminous treatments cost an average of $1,000 to $2,000 a mile.

Black Gold Days Festival

HUNTINGTON BEACH, Calif., Aug. 19.—A "Black Gold Days Festival," expected to bring hundreds of oil men, will be held here August 31, September 1 and 2. The celebration is being arranged by the Huntington Beach Chamber of Commerce.

Michigan Field Report

WEXFORD COUNTY WILDCAT ESTIMATED AT 1,000 BARRELS

By
PAUL A. ELLIOTT

MUSKEGON, Mich., Aug. 19.—A wildcat, some 2 miles northeast of Cadillac, on E. Webb lease, C SW Section 13-22n-9w, Haring Township, Wexford County, was brought in with an estimated potential of 1,000 bbls. by M. J. Ingold. Three other week-end completions in Montcalm and Mecosta Counties added a flow of 2,500 bbls. in one Ferris Township oil producer in the northwest section of Crystal Pool and 15,000,000 feet of natural gas in two Hinton and Millbrook Townships tests.

T. F. Caldwell, Inc.'s No. 1 Jesse Flint, Section 35, Ferris Township, made 2,500 bbls. of oil daily from Dundee. C. H. Bell's No. 1 Ora Satterlee, Section 25, Hinton Township, made 10,000,000 feet of gas daily from Michigan Stray sands, while W. J. Bernier's No. 1 E. Tiffany, Section 32, Millbrook Township, made 5,000,000 feet from the same pay.

Natural gas developments otherwise took the lead over oil completions in size and importance to the industry. Several interesting wildcats and important extension tests were nearing completion, however, promising a better record this week.

Only one 40-bbl. Dundee well was completed in Ogemaw County and two 20-bbl. Berea wells in the Saginaw Field. A show was reported in a Clinton County wildcat, while two tests were dry, one in Gladwin and the other in Osceola County.

Crystal Field

The only new completion in the Crystal Field was the Burnstein Oil & Gas Co.'s No. 2 J. J. Keel, NW SE SE Section 35-11n-5w, Ferris Township, Montcalm County, which made 180 bbls. in 24 hours at a total depth of 3,200 feet after topping the Dundee at 3,191 feet and the Traverse at 2,715 feet. It was completed in the record time requiring 29 days from spudding to casing including a three-day fishing job. More than 1,400 feet of hole was made in one week from the bottom of 6-inch casing at 1,255 feet to the top of the Traverse.

No. 2 Keel is an offset to No. 1 which started the drilling trend toward the northwest where some of the larger Crystal Pool producers now are being found.

Acid treatment of the Michigan Producers & Refiners and Alvin H. Weber's No. 1 William B. Strait, SE NE SW Section 3-10n-5w, Crystal Township, also on the northwest trend, increased its daily flow from 100 to more than 1,000 bbls., or about 50 bbls. an hour.

Heavy flows of gas estimated from 5,000,000 to 8,000,000 feet daily were struck in Shell Petroleum Corp.'s No. 1-A L. J. Smead, SE NE SE Section 2, and Eastern Gulf Oil Co.'s No. 2 Z. D. Rule, NE NE SW Section 2, both in the northwest sector of Crystal Township. Both were mudded off to drill on for oil.

One of the tests attracting considerable interest as the week closed was Charles Van Keuren, trustee's No. 1 Maud Evans, NE NE NE Section 22, Crystal Township, located about 2 miles south and half a mile west of the Durbin discovery. It had been drilled to 3,194 feet after casing at 3,177 feet as the farthest test southward seeking a possible extension of the new central Michigan Field.

The Rowmor Corp.'s No. 1 Frank Clark, NW NW NW Section 2, Crystal Township, also had reached the Dundee casing point and was expected to drill in within a few days as an east offset to the T. F. Caldwell, Inc.'s No. 1 Robbins, a 2,400-bbl. initial producer.

Ferris Township

Some interest also was being attracted by the Marshall Bauman and others' No. 1 G. Ries, SE NW NE Section 34, Ferris Township, located about a mile northwest of the Caldwell-Robbins. It was cased and ready to drill in after reaching a depth of more than 3,100 feet. T. F. Caldwell, Inc.'s No. 1 Jesse Flint, SE SE SW Section 35, Ferris Township, also was drilling below 3,120 feet as a north offset to the Caldwell-Robbins well expected to complete this week.

The Michigan Gas & Oil Co.'s No. 1 Clarence Dean, SE SW SW Section 30-11n-3w, Arcada Township, Gratiot County, also is expected to be ready to test the Dundee this week several miles east of the Crystal Field.

Mecosta-Montcalm Gassers

In the active Millbrook-Hinton and Belvidere Township gas area of Mecosta and Montcalm Counties where more tests are drilling to the Michigan Stray gas sands than ever before, the Gordon Oil Co. brought in its No. 1 Roberts and others, C SW SW Section 33-13n-7w, with an open flow capacity gauged at 10,998,000 feet, the largest gasser in this field to date. The Stray formation was topped at 1,260 feet and the well drilled to 1,275 feet total.

The Hal-Be-Oyle & Gas Co. also completed its No. 4 Taggart Brothers, Inc., C NW SE Section 3-14-9w, Austin Township, Mecosta County, for an open flow of 3,000,000 feet a day at 1,345 feet, or 5 feet in the Michigan Stray sands topped at 1,340 feet, where it showed 2,000,000 feet the week before.

Two tests were unsuccessful in the shallow gas sands in the Millbrook area but may be deepened for oil. They are Bryan & Martin's No. 1 William Caldwell, C SE NW Section 26-13n-7w, dry at 1,346 feet, and Guy M. Obenauer's No. 1 Behrenwald, C NW SE Section 26-13n-8w, which suspended drilling with a hole full of water at 1,325 feet on a location west of the Millbrook producers.

Two other tests in this section of central Michigan were nearing the Stray sands as follows: W. J. Bernier's No. 1 E. Tiffany, C NW SE Section 32, Millbrook, cased at 1,230 feet, and C. H. Bell's No. 1 Fatterlee, C SW NE Section 25, Hinton, drilling at about 1,200 feet.

Two miles northwest of the Hal-Be-Oyle's No. 4 Taggart, the Taggart Brothers, Inc., were preparing to drill in their No. 14 test in Austin Township on the Paul Schmidt lease, C SW NW Section 33-14n-9w, which had been shut down for some time two locations east of the 500,000-foot first test in Colfax Township, Mecosta County.

Among the Montcalm County tests outside the Crystal area, L. G. Thompson's No. 1 J. K. Knapp, E SE W Section 17-12n-9w, Winfield Township, which was estimated good for a daily flow of 5,000,000 to 8,000,000 feet of gas from the Marshall sands before being drilled on to failure in the Dundee oil sands, had been successfully plugged back and was being completed as the discovery gasser of a probably new gas pool near Howard City.

Gordon Oil and Cato Oil companies' No. 1 Paulson, NW SW NW Section 24, Winfield Township, had reached a depth of 110 feet in the Dundee without striking gas, oil or water and was still drilling but with little hope of success. Same company's No. 1 Keyt, NW NW NW Section 21-12n-8w, Cato Township, was drilling at 1,125 feet and near the shallow gas sands. Rex Oil & Gas Co.'s No. 1 Sanford Newland, NW NW NW Section 2, same township, also was nearing the gas sand level.

The Michigan Exploration Co. also was expected to test the gas sand in the No. 1 Francis G. Withey, C NW NW Section 6-12n-6w, Home Township, Montcalm County, this week after casing at 1,057 feet.

Midland County

Pure Oil Co.'s No. 6 Floyd Younglove, in Section 17-13n-1w, Porter Township, finally made 109 bbls. in the first three hours after acid treatment and was estimated good for 750 bbls. a day in the Dundee pay sands at 3,485 feet. The Pure company also had drilled to a total depth of 3,451 feet in its No. 1 Emma O. Reed, C S SW SW Section 1-13n-2w, Jasper Township, with some oil in the hole to be treated with acid before completion.

Hubbell Oil Producing Co.'s No. 1 Mary Jacobs, NW NE SE Section 9-14n-2w, Greendale Township, made about a 75-bbl. producer after acid treatment and extended the proved area one location northward. Dundee was topped at 3,519 feet, the hole drilled to 3,582 feet and plugged back to 3,566 feet for treatment.

Pure's No. 2 Hicks, SW NW SW Section 14, Porter Township, also had been treated with acid but not yet tested for production after plugging back from 3,456 to 3,446 feet.

Isabella County

Karl K. Liebrand, trustee's No. 1 State of Michigan, C SW SW Section 35-15n-6w, Sherman Township, was the only Isabella County test nearing possible completion this week. It was ready to drill into the Michigan Stray gas sands after casing at 1,267 feet.

Ogemaw County

Only one test was completed in Ogemaw County and that for an initial daily output of about 40 bbls., M. J. Ingold's No. 1 L. C. Quackenbush, SW NW SW Section 13-22n-1e, Ogemaw Township. Dundee was topped at 2,771 feet and the well finished at 2,898 feet. It was plugged back to 2,882 feet.

Fred D. Clark and Cleston Johnson expected to complete their No. 1 State of Michigan this week located NW NE SE Section 6-21n-3e, Mill Township, after topping the Dundee at 2,450 feet and drilling at below 2,475 feet.

Saginaw County

Two 20-bbl. Berea wells were completed in Birch Run Township by the Smith Petroleum Co.'s No. 1 Soule & Ackerman, SW NE SE Section 20-10n-6e, topped the Berea at 1,530 feet and completed at 1,549 feet for 15 to 20 bbls. after a shot. The 1-A Morse, SE SE NW Section 20, same township, struck the Berea at 1,531 feet and was finished after 18 feet more of drilling. With 9 feet of pay the Morse made 8 bbls. naturally, 40 after a shot but 25 on the pump.

Gladwin County

Sun Oil Co. completed another dry hole in the Gladwin territory when its No. 1 John Peterson, C SW SE Section 19-17n-1w, Tobacco Township, failed to strike the Dundee pay after drilling from the top of the limestone at 3,816 to 3,949 feet without finding oil, gas or water.

Wildcats

A show of oil and gas was reported in the upper Traverse in D. A. Burris' No. 1 John Becker, C NW SE Section 35-8n-3w, Essex Township, Clinton County, at 2,548 feet, or 103 feet in the formation. The drill went into water, however, and continued to 2,615 feet.

Gordon Oil Co.'s No. 1 Giese, SW SE NW Section 34-18n-10w, Lincoln Township, Osceola County, was being plugged and abandoned after striking water in the Dundee.

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Oklahoma Operations

By JAMES McINTYRE

EDMOND POOL WELL FLOWED AT 23,000-BBL. RATE PER DAY

What might prove to be the most important development during the week in Oklahoma field operations is the discovery of oil in the second Wilcox sand in the Wofford Pool in Seminole County, midway between the Sasakwa and Konawa Pools. Atlantic Oil Producing Co.'s No. 1 Patterson, SW NE Section 8-6-7, Wofford Pool in Seminole County, got an unexpected large flow of oil from the second Wilcox sand logged from 4,027-29 feet, when, in the first hour and 40 minutes it gauged 286 bbls. of oil flowing through the casing. It made 185 bbls. of oil the next hour and 15 minutes and was then shut in for additional tankage. This is the first well to be drilled to the second Wilcox sand in the pool, production being increased materially from what it had been doing in the first sand. It is very likely that the same company's No. 1 Gentner, an offset to the west, now averaging around 50 bbls. daily from the first Wilcox sand at 4,033-42 feet, will be deepened. This is the third oil well for the pool, and an offset to the north of the discovery, No. 1 Thomas, completed in April for 1,120 bbls. of 40 gravity oil in the first Wilcox sand at 3,945-50 feet.

The Edmond Pool in Oklahoma County scored another hit in the latter part of the week when Mid-Continent Petroleum Corp.'s No. 5 Young, SW NW NE Section 31-14-3w, came in flowing at the rate of 23,000 bbls. daily based on a three-hour gauge of 2,862 bbls. of oil. This test, on the upper formations, was running very low but certain sections were cut out and it was placed back in the running with other nearby wells, and has established one of the largest potential production figures to date in the pool. The Edmond Pool is definitely one of Oklahoma's largest potential producers of crude oil. The sand record on the No. 5 Young was first Wilcox 6,517 feet, second Wilcox 6,555 feet. Total depth is 6,700 feet.

The Polo Pool in Noble County is now defined on two sides with the completion this past week of Stanolind Oil & Gas Co.'s No. 1 Shoop, NW SW SE Section 27-22-2w, a little more than one-quarter of a mile east of the present producing limit. Wilcox sand topped at 4,923 feet, filled the hole with water from 4,955 to 4,960 feet, total depth. It was then plugged back to 4,930 feet and acidized and upon opening the well after letting acid penetrate the sand and dolomite, there was 2,000 feet of water and 100 feet of oil in the hole which resulted in the abandonment of the test. On the west side of the pool is the Mid-Continent Petroleum Corp.'s No. 1 Smith, SE SW NE Section 28-22-2w, which was a dry hole at 4,935 feet, defining the pool on the west side. To the south is the old Elaine Oil Co.'s No. 1 Burke, in the C SE ¼ Section 33-22-2w, that logged Wilcox sand at 4,816 feet and responded with 130 bbls. of oil daily after a 40-quart shot in that sand. At 5,050 feet, total depth, it swabbed only 30 bbls. of oil in 40 hours, and was finally abandoned when tools were lost in the hole. This latter well might be considered by some as a third limit to the pool; however, it is nearly 1 mile south of the present boundary.

Oklahoma Production

Estimated daily average production of Oklahoma for the week ending August 17 and for the preceding week is as follows:

	Barrels	
	Aug. 17	Aug. 10
Allen	7,850	7,850
Asher-West Asher	1,225	1,200
Burbank	8,200	8,500
South Burbank	10,500	11,100
Balance Osage	26,250	26,750
Blackwell	4,750	4,750
Bristow-Slick	9,150	9,150
Chandler	4,550	4,575
Crescent	4,625	4,850
Cromwell	4,325	4,325
Cushing-Shamrock	13,500	13,500
Duncan district	4,200	4,200
Edmond	6,175	4,150
Fish	10,325	9,000
Fitts	19,375	15,025
Gray	1,950	1,275
Graham	4,300	4,250
Healdton	9,650	9,650
Hewitt	4,825	4,825
Holdenville	1,500	1,500
Keokuk	2,150	3,375
Konawa	1,775	1,725
Lucien	9,250	8,525
Marshall-Lovell	1,100	1,100
Oklahoma City	145,875	144,925
Papoose	1,200	1,200
Polo	3,250	3,000
Sasakwa and townsite	2,650	2,775
Sholem-Alechem	4,025	4,025
Seminole Field:		
Bowlegs	10,500	11,600
Carr City	6,925	4,825
Earlsboro	9,700	9,825
East Earlsboro	9,525	10,425
South Earlsboro	1,150	1,100
Little River	14,350	13,750
East Little River	675	850
Maud	1,050	1,100
Mission	2,925	3,180
Seminole	11,875	12,275
East Seminole	1,350	1,425
Searight	4,025	4,300
Total Seminole	74,950	74,655
St. Lou's-Pearson	25,325	23,900
Tatums	4,725	4,725
Tonkawa-Garber-Thomas	5,750	5,750
Wewoka	3,550	3,550
Yale-Jennings	5,100	5,100
Other pools	57,650	57,620
Total Oklahoma	504,650	496,370

Osage County

Carter Oil Co. and associates' No. 8 Denoya, NE SW SW Section 10-25-6, on the unit block in the South Burbank Pool of Osage County, has been completed in the Bartlesville sand at 2,814-58 feet, total depth, producing 1,110 bbls. of oil 24 hours.

In the Naval Reserve Pool in Osage County, Lewis Production Co. and the Texas Co.'s No. 6, NW SW SW Section 9-24-7, pumped 60 bbls. of oil and 28 bbls. of water in 24 hours from the Bartlesville sand drilled from 2,659-99 feet. Total depth is 2,702 feet.

In the same pool, Lewis Production Co. and Continental Oil Co.'s No. 11, NW SW Section 16-24-7, logged Bartlesville sand from 2,578-2,615 feet, total depth, flowing 345 bbls. of oil after a 60-quart shot from 2,586-2,610 feet. It is completed.

In the Ohio-Osage Pool in Osage County, Gray & Tolson's No. 8, NE SW SW Section 27-21-9, has been completed in the Layton sand at 1,103-11 feet, total depth, pumping 25 bbls. of oil the first 24 hours after a 30-quart shot.

Texas Co.'s No. 6-A (twin), C N half N half SW Section 17-21-10, Madalene Pool in Osage County, shot with 80 quarts and acidized with 1,000 gallons the Mississippi lime formation from 2,248-2,560 feet, total depth, is completed for 3 bbls. daily on the pump.

There were three new operations in Osage County as follows: Ross Oil & Gas Co.'s No. 5, 300 feet north and 700 feet east of the SW cor. SE Section 22-28-10, a location; Texas Co.'s No. 1-W, 550 feet north and 1,005 feet west of the SE cor. SW Section 28-23-11, rigging up machine; Pueblo Oil Co.'s No. 7, 1,000 feet north and 770 feet west of the SE cor. SW Section 14-21-8, spudding.

Grant County

L. H. Wentz and others' No. 1 Community Wirtz, SE NW Section 22-28-4w, Grant County wildcat, is shut down for water at 3,433 feet.

Shell Petroleum Corp. and others at No. 1 Foster, NW SE Section 30-27-8w, western Grant County wildcat, is drilling below 1,700 feet.

Contract has been completed on Helmerich & Payne, Inc.'s No. 1 Crouse, NE SW Section 29-25-8w, southwestern Grant County wildcat that has been closely watched from the beginning. Total depth is 6,502 feet in Sylvan shale. It is rumored the Stanolind Oil & Gas Co. and Amerada Petroleum Corp. will finance the drilling of this well on down to the Wilcox sand horizon.

Logan County

Continental Oil Co.'s No. 1 McConnell, C SE SE Section 27-17-4w, in the Crescent Pool in Logan County, deepened from 6,148 feet in the first Wilcox sand to 6,327 feet in the second Wilcox sand topped at 6,265 feet, is completed for 2,211 bbls. of oil on a potential test. It is estimated that an increase for 2,211 bbls. of oil on a potential test. It is estimated that an increase of 240 bbls. of oil daily was obtained in drilling this well to the second sand.

Major County

Indian Terirtory Illuminating Oil Co. and Continental Oil Co.'s wildcat northwest of Fairview, No. 1 Fairview in the C E half SW SE Section 32-22-14w, Major County, is drilling below 7,250 feet in lime and is Oklahoma's deepest drilling well at the moment. A sand logged from 6,857 to 6,917 feet proved to be hard, fine grained sand with a show of gas and slightly stained in the base of a core from 6,864-82½ feet. Identity of the sand is unknown but is being referred to as either the Prue or the Skinner.

Noble County

Stanolind Oil & Gas Co. and associates at No. 5 DeBord "B," SW cor. Section 27-22-2w, in the Polo Pool in western Noble County, logged first Wilcox sand from 4,822 to 4,853 feet, total depth, where it started cutting 3 per cent water and b.s. in the bottom. It was plugged back to 4,848 feet acidized, and swabbed 30 bbls. per hour. On a 24-hour potential test it made 312 bbls. of oil, swabbing and flowing, which is considered less production than previous gauges indicated.

On the southeast side of the Polo Pool, Stanolind Oil & Gas Co. and associates' No. 1 Shoop, NW SW SE Section 27-22-2w, topped Wilcox sand at 4,923 feet, had a hole full of water at 4,955 to 4,960 feet, total depth, and was plugged back to 4,930 feet and acidized. Upon opening the well after letting acid penetrate the sand and dolomite, there was 2,000 feet of water and 100 feet of oil in the hole and the test is abandoned. This defines the Polo Pool in this direction.

Twin State Oil Co.'s No. 1 Pfeiffer, C N half NE SW Section 33-20-2w, Lucien Field in Noble County, has been officially completed for a potential gauge of 720 bbls. of oil. Production is coming from the first and second Wilcox sands, topped at 4,907 and 4,998 feet, respectively, with total depth at 5,095 feet in the second sand.

Stanolind Oil & Gas Co. and Amerada Petroleum Corp.'s No. 3 Fredericks, C SE SE Section 28-20-2w, Lucien Pool, is swabbing at the rate of 2 bbls. of oil per hour from Wilcox sand logged from 5,142 to 5,165 feet, total depth.

Sinclair Prairie Oil & Gas Co.'s No. 1 Fredericks, NE Section 33-20-2w, Lucien Pool in Noble County, logged Viola lime at 4,975 feet, cemented 7-inch casing at 4,990 feet and cable tools were being rigged up at 5,001 feet, total depth.

Phillips Petroleum Co.'s No. 1 Lee, NE NW Section 3-19-2w, south end of the Lucien Pool and in Logan County, is drilling in Wilcox sand at 5,062 feet, topped at 5,001 feet with not too favorable indications of making a commercial well in the sand. It is producing on an average of 125 bbls. of oil every two days from the Viola lime.

Shell Petroleum Corp. and others' No. 2 Farr, C E L NE Section 19-20-2w, is flowing by heads at the rate of 70 bbls .per hour from the first Wilcox sand at 4,978 to 5,023

feet and the second Wilcox sand at 5,070 to 5,166 feet, total depth. This well is rather low on the structure and will probably be completed at the present depth for fear of drilling into water.

Stanolind Oil & Gas Co. and associates at No. 1 Pfeiffer, C S half NE SW Section 33-20-2w, topped Wilcox sand at 4,898 feet, cemented 7-inch casing at 4,889 feet, and when plugs were drilled at 4,901 feet, total depth, there was a good show of oil and gas. They were preparing to drill deeper.

Pawnee County

In the Cleveland district of Pawnee County, Stanley Martin was drilling at 1,125 feet in No. 10 Cotton, 1,150 feet south and 650 feet west of the center of Section 6-20-8, a new operation in Pawnee County for the week.

Payne County

Amerada Petroleum Corp. Stanolind Oil & Gas Co., Gypsy Oil Co. and Wilcox Oil & Gas Co.'s community wildcat in Payne County, southeast of Stillwater, has been officially completed for 587 bbls. of oil in 24 hours, making 2 per cent mud and 1 per cent salt water. This wildcat discovery is producing in 4 feet of Wilcox sand at 4,305 feet, total depth.

M. K. McCann, trustee's No. 1-A Duncan, W half NE SW Section 30-18-5, Payne County, March Pool, is a new operation for the week. A fishing job was under way at 554 feet, total depth.

Tulsa County

In the Broken Arrow district of Tulsa County, Owens & Sons at No. 2 Owens, NE SW NW Section 27-18-14, encountered a small show of oil in the Tyner sand at 1,890-1,955 feet and a hole full of water from 2,093-2,116 feet and the test is abandoned at 2,187 feet, total depth.

New operations starting up in Tulsa County during the week under review follow: Machling and others' No. 1 McIntosh, C S half SW SW Section 12-17-14, drilling 500 feet; Somerset Oil Co.'s No. 3 Depriest, NE SE NE Section 35-17-12, spudding; and Owens & Son's No. 3 Owens, SW NW NW Section 27-18-14, rigged up and shut down.

Wagoner County

Cahill & Howard's No. 2 (twin) Canard, SE NW NW Section 8-17-16, Coweta Pool in Wagoner County, logged Dutcher sand from 980-990 feet, total depth, and is completed for 50 bbls. daily after a 40-quart shot of nitro.

White Rose Oil Co.'s No. 4 Porter, NW SE NW Section 14-17-15, in the Globe Pool of Wagoner County, encountered only a small show of oil in sand at 1,131-54 feet and is dry and abandoned at 1,191 feet, total depth. Same operator's No. 5 Porter, SE NE SW NW Section 14-17-15, is a new operation for the week, rigging up.

J. Boley has staked a location for No. 1-A Jackson, C N half SW SW Section 3-17-15, Coweta Pool in Wagoner County, a new operation.

Creek County

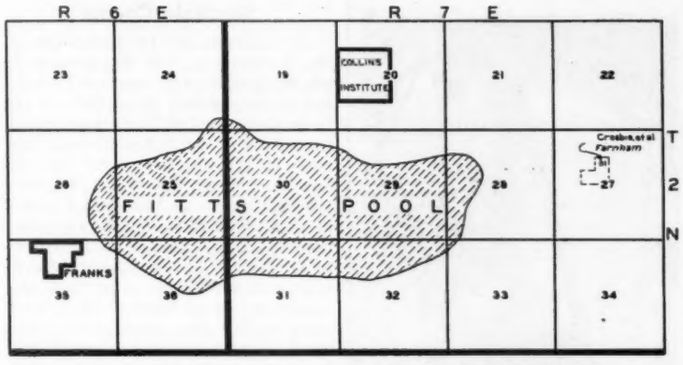
Kirchner & Jordan have completed their No. 19 Sneed, SW SE Section 7-14-9, in the Deep Fork Pool in Creek County. Peru sand logged from 2,348-70 feet, total depth, produced 10 bbls. of oil after a 60-quart shot of nitroglycerin.

Sidwell Drilling Co.'s No. 1-A McGilbray, SW NE NE Section 30-14-8, Arno Pool in Creek County, deepened from 3,570 feet to a sand at 4,043 to 4,058 feet, total depth, is completed for 16 bbls. of oil daily.

L. B. Jackson has abandoned location for his No. 1 E. Mikey, NE SW NW Section 1-17-8, Olive Pool district of Creek County.

Sinclair Prairie Oil & Gas Co.'s No. 10 (twin) Wacoche, SW SE SW Section 20-18-7, Cushing Pool, is dry and abandoned at 2,600 feet. A showing of oil was had in the Wheeler lime from 2,135-80 feet and the Oswego lime at 2,216 feet and Prue sand at 2,248-70 feet were dry.

New operations in Creek County during the past week follow: Sinclair Prairie Oil & Gas Co.'s No. 4, old well drilled deeper, Kernal, NW NE SE Section 30-14-8, rigging up to deepen at 3,406 feet; Pure Oil Co.'s No. 1 Kernal, old well drilled deeper, SW SE NE Section 30-14-8, rigging up to deepen from 3,412 feet; Riverland Oil Co.'s No. 1 Burgess, SW cor. Section 32-15-9, drilling 400 feet; Sherry & Murta's No. 1 Gibson, 1,120 feet north and 500 feet east of the SW cor. Section 6-16-12, rig; and Sinclair Prairie Oil & Gas Co.'s No. 6 Mickey, old well drilled deeper, SE SW Section 33-18-7, total depth 2,580 feet, plugged back to 1,180 feet and standing cemented.



J. E. Crosbie and others will try to extend the Fitts Pool eastward on a block in Section 27-2-7, Pontotoc County

Okmulgee County

Lee & Allen's No. 13 Charles, NE NW SW Section 1-15-14, Haskell Pool in Okmulgee County, is completed for 12 bbls. of oil after shooting sand at 1,339-52 feet, total depth, with 40 quarts of nitro.

C. D. Klingensmith's No. 10 Grayson, C N half SE NW Section 35-16-11, Pollyanna Pool in Okmulgee County, logged sand from 1,778 to 1,845 feet, total depth, which yielded 40 bbls. of oil in 24 hours after a 140-quart shot of nitro.

Okmulgee County's only new operation was W. B. Pine's No. 1 Duff, a location in the SW NE NE Section 11-14-12.

Muskogee County

There were no completions in Muskogee County during the past week. New operations were: Mussellem's No. 1-A Lewis, SE NW NE Section 17-14-17, drilling at 800 feet, and J. M. Foltz' No. 2 McIntosh, C N half N half SE Section 17-14-17, drilling at 1,500 feet.

Okfuskee County

Kimbley Oil & Refining Co.'s No. 1-A Phillips, SE NE Section 32-13-10, had a small flow of oil and a hole full of water in sand at 3,688-3,710 feet, total depth, and it is abandoned.

Ray Vincent and others' No. 1 Carter, SW SE SE Section 13-13-10, Gypsy Hill Pool in Okfuskee County, is completed in sand at 2,635-2,639 feet, total depth, for 5,000,000 feet of gas, 625 pounds rock pressure.

New operations in Okfuskee County were: Burke-Greis' No. 1 Scott, SW NW Section 20-10-10, drilling at 2,310 feet, and Oklahoma Oil Corp.'s No. 1 Harchache, C SE SW Section 13-13-10, drilling at 2,588 feet.

Oklahoma County

Mid-Continent Petroleum Corp.'s No. 6 Young, NW NW NE Section 31-14-3w, started at 2,920 bbls. in 12 hours from sand at 6,632-6,701 feet.

Continental Oil Co.'s No. 3 Young, SE NE NW Section 31-14-3w, flowed 1,039 bbls. in three hours, but the sand record was not available.

Slick-Urschel, Inc., and others' No. 2, C NW NW NE Section 31-14-3w, had Wilcox sand at 6,665-6,708 feet and was bailed in. It flowed 697 bbls. of oil in one hour with gas at the rate of 13,000,000 feet and later 410 bbls. in one hour with gas at the rate of 11,000,000 feet per day.

Amerada Petroleum Corp. and Stanolind Oil & Gas Co. have completed their No. 3 Suenram, SE NE NE Section 6-13-3w, Edmond Pool, establishing a four-hour potential of 282 bbls. of oil from the second Wilcox sand logged at 6,673 to 6,720 feet, total depth.

Continental Oil Co.'s No. 3 Young, SE NE NW Section 31-14-3w, logged the top of the Wilcox sand at 6,610 feet and was bottomed at 6,707 feet. It has been connected and is ready to be brought in on production.

Pure Oil Co.'s No. 1 Berquist, SW SE Section 30-14-3w, was drilling below 6,220 feet and running about normal on the top of the Oswego lime.

There were three new operations under way in the Edmond Pool last Saturday. Marathon Oil Co. has driven stake for No. 8 Dahl, in the SW cor. SE Section 31-14-3w. Mid-Continent Petroleum Corp.'s No. 8 Young was a location in the SE NW NE Section 31-14-3w. Marathon Oil Co. had pits dug and was digging cellar in the SE SW Section 31-14-3w for its No. 1 Rankin.

Wildcat Progress

The Gypsy Oil Co. at No. 1 Salisbury, NW NE NE Section 13-14-4w, northwest of the Edmond Pool, was coring below 6,711 feet. At 6,701 feet it was bailed to the bottom, then let stand for two hours, during which time it filled 200 feet with oil and water, 10 per cent being oil. It looks like this test is a duster.

Preparations are under way to plug back Sinclair Prairie Oil & Gas Co.'s No. 1 Corbett, NE NW NE Section 17-13-3w, a wildcat between the Edmond and Britton Pools in Oklahoma County that has been producing for nearly six weeks from the Wilcox sand at 6,645 feet. This test was first completed at a total depth of 6,706 feet, where it produced 783 bbls. of oil with considerable water the first 15 hours. It later has been deepened to 6,733½ feet, where a test showed definitely that the water was coming from the bottom of the sand, and now it is to be plugged back, possibly to the Simpson dolomite formation.

In the Britton townsite area, J. E. Mabee's No. 1 Haskins, in the SW SE NE Section 20-13-3w, was drilling at 6,570 feet in the Viola lime.

Slick-Urschel, Inc.'s No. 1 Meeker, NW cor. Section 29-13-3w, topped the Checkerboard formation at 5,497 feet and was drilling at 5,975 feet.

Slick-Urschel, Inc.'s No. 1 Zielney, NE SW Section 29-13-3w, was drilling at 6,714 feet.

Champlin Refining Co.'s No. 1 Whitside, 1,150 feet north and 250 feet east of the SW cor. NW Section 35-12-3w, north end of the Oklahoma City Pool in the new drilling zone, has been completed as a small well in the Wilcox sand at 6,288 to 6,393 feet, total depth, flowing 194 bbls. of oil in 24 hours.

McIntosh County

Glen Cole and others had a rig on the ground for their No. 1 Woodard, a wildcat in NE SW NE Section 2-12-17, northeastern McIntosh County.

Oklahoma City Pool

Champlin Refining Co.'s No. 1 Latimer, 1,020 feet north and 1,305 feet east of the SW cor. NW Section 35-12-3w, Oklahoma City Pool, missed the Wilcox sand and is completed for 194 bbls. of oil daily in the School Land sand logged from 6,415-6,435 feet, total depth.

Champlin Refining Co.'s No. 1 Butler, 1,126 feet north and 698 feet east of the SW cor. Section 35-12-3w, Oklahoma City Pool, is completed for 9,000,000 feet of gas in Wilcox sand at 6,247 to 6,371 feet, total depth.

American Oil & Refining Co.'s No. 4 Washington Park, 400 feet south and 125 feet east of the NW cor. SW cor. Section 35-12-3w, Oklahoma City Pool, is completed in Wilcox sand drilled from 6,240 to 6,356 feet, total depth, for 216 bbls. of oil daily with 15,000,000 feet of gas.

Phillips Petroleum Co.'s No. 1 Kennedy, 231 feet north and 940 feet west of the SE cor. NE Section 34-12-3w, Oklahoma City Pool extension zone, which was completed as a 35,000,000-foot gas well in June, started making oil early this month and a potential test on August 9 showed it good for 3,412 bls. of oil per day. A new potential is scheduled for this unusual producer in as much as each day its production has increased and the last gauge taken showed it capable of 5,237 bbls. Such action on the part of this well makes the new zone look considerably better but a miracle would be necessary to change the aspect of a flock of producers such as those completed this past week and records of which are given above.

New operations in Oklahoma County during the week were: Marathon Oil Co.'s No. 2 Keefer, SW NW NW

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PETROLEUM ELECTRIC POWER CLUB

Section 5-13-3w, digging cellar, and same company's No. 8 Dahl, SW SE Section 31-14-3w, a location.

Lincoln County

Stanolind Oil & Gas Co. and Amerada Petroleum Corp.'s wildcat west of the Chandler Pool in Lincoln County, No. 1 Purcell, NW cor. Section 4-14-3, were drilling ahead after making a drill stem test of the Skinner sand topped at 4,394 feet and drilled to 4,414 feet. The test showed only 3 feet of mud.

The Texas Co.'s wildcat, No. 1 Niccum, SE SW NW Section 28-14-5, southwest of Davenport in Lincoln County, is a failure in the Wilcox sand at 4,863 feet and is being plugged back for a test of the Bartlesville.

Seminole County

The Atlantic Oil Producing Co. at No. 1 Patterson, SW NE Section 8-6-7, Wofford Pool in Seminole County, got an unexpected large flow of oil from the second Wilcox sand logged from 4,027 to 4,029 feet, making 286 bbls. of oil the first hour and 40 minutes through the casing. It made 185 bbls. the next hour and 15 minutes and was then shut in for additional tankage. This is the first well to be drilled to the second Wilcox sand and production was increased materially from what it had been doing in the first sand. It is very likely that the same company's No. 1 Genter, an offset, producing around 50 bbls. daily from the first sand, will be deepened.

VanDeventer and others' No. 1-A Bender, NE SW Section 3-8-8, a wildcat northeast of Wewoka in eastern Seminole County, is a discovery in the Gilcrease sand logged at 3,170 to 3,200 feet, total depth, producing 95 bbls. of oil in four hours on the swab. It is to be given a shot of nitroglycerin.

Carter Oil Co. and associates' No. 4 Canard, C N half SW SE Section 35-11-6, Keokuk Pool, in northern Seminole County, is a completion in the Misener-Hunton formations, topped at 4,051 feet and 4,065 feet, respectively, with total depth at 4,073 feet. It flowed 108 bbls. of oil on a six-hour test.

Mid-Continent Petroleum Corp.'s No. 5 Harjoche, SE SW SE Section 31-7-8, Fish Pool in Seminole County, encountered Viola lime at 4,128 feet, Simpson dolomite at 4,240 feet and Wilcox sand at 4,273 feet to 4,277 feet, total depth, and with the 6-inch casing set at 4,138 feet, is presumably producing from the three formations, swabbing 117 bbls. of oil in six hours after acidizing, for its completed gauge.

In the Carr City Pool, Gypsy Oil Co.'s No. 3 Coker, NE SW NE Section 2-8-5, missed the pay in the Wilcox sand at 4,237 to 4,298 feet and is dry and abandoned at 4,300 feet in shale.

Pottawatomie County

Mohawk Oil & Gas Co. has abandoned location for its No. 1 Wilsie, SE NE SW Section 7-7-4, St. Louis Pool in Pottawatomie County.

Superior Oil Co. has abandoned its No. 1 Long, NE NW NE Section 5-6-4, south end of the St. Louis Pool, at 4,260 feet, total depth, 10 feet in the Viola lime. This test had a collapsed casing and the hole was abandoned after futile attempts were made to clean it up.

There was one inside well and one wildcat well started in Pottawatomie County the past week. Superior Oil Co.'s No. 1-A Long, a twin to No. 1 Long in the NE NW NE Section 5-6-4, is a location, and Ross Oil Co. and others have staked location for their No. 1 Sparkman, SE NE Section 33-8-4, a wildcat north of the St. Louis Pool.

Hughes County

Shepard and others, at No. 1 Oliphant, NE SW Section 12-9-8, Olympic Pool in Hughes County, is completed in the Sonora formation logged from 1,710 to 1,750 feet, total depth, swabbing and flowing 507 bbls. of oil in 24 hours. This is an unusually good well in the Sonora stratum and the first in the Olympic Pool.

Davis and others' No. 1 Roberts, SE NE SE Section 5-8-10, is a location and a new operation for Hughes County for the week.

Pontotoc County

Morris and Wilson's No. 2 McElroy, NE SW NE Section 22-5-8, Allen Pool in Pontotoc County, tested dry sand from 873 to 885 feet, total depth, and the test is abandoned.

Minnesota-Wisconsin Oil Producing Co.'s No. 6 Oliver, SW NE NE Section 32-5-7, at Francis in Pontotoc County, got a small show of oil at 1,210 feet in lime, a dry sand from 1,348 to 1,355 feet and a hole full of water at 1,370 feet, total depth, and the well is abandoned. Same company's No. 5 Oliver, 1,170 feet south and 660 feet east of the NW cor. NE of Section 32-5-7, topped sand at 1,204 feet and is drilling ahead at 1,208 feet.

Fitts Pool

Stanolind Oil & Gas Co.'s No. 2 Norris, SE SW SE Section 25-2-6, Fitts Pool in southern Pontotoc County, one of the early producers showing water in the Bromide sands, has been plugged back from 4,315 feet in McLish lime to 4,258 feet in the first Bromide sand and recompleted for 280 bbls. of oil in 24 hours, flowing through tubing. Originally, this well produced 1,229 bbls. of oil the first two and one-half hours flowing through casing, producing from the first and second Bromide sands. It later started making water in such amounts that it was found prudent to attempt a shut-off, the result being that the second Bromide has been completely shut off and production is now coming from the first Bromide and possibly the Viola lime.

E. H. Moore and others' No. 7 Akers, SW NW NE Section 36-2-6, southwest edge of the Fitts Pool, logged Bromide lime at 4,520 to 4,530 feet, total depth. A hole full of water was had from the second Bromide sand and the test has been plugged back to 4,470 feet in the first sand and treated with 2,000 gallons of acid and completed for 634 bbls. of oil in seven hours, flowing through 2½-inch tubing set at 4,428 feet.

E. H. Moore and others' No. 1 Benton, NW NE NW Section 32-2-7, has been completed for 1,684 bbls. of oil in seven hours, flowing while pressure drilling from 3,980 to 4,025 feet. A log of the well shows Bromide lime at 3,795 feet; first sand at 3,885 feet; second sand from 3,900 to 4,025 feet, total depth.

E. H. Moore and others' No. 10 Wirick, SW SE SW Section 29-2-7, Fitts Pool, logged Bromide lime at 3,840 feet, first sand at 3,955 feet,

second sand at 4,030 feet, McLish lime 4,060 feet and total depth at 4,266 feet. It flowed 416 bbls. of oil the first hour and 296 bbls. the second hour, both gauges being through casing.

E. H. Moore and others' No. 5-A Craddock, a twin to No. 5 gas well, in the NE NW SW Section 29-2-7, Fitts Pool, is completed. Bromide lime was encountered at 3,955 feet, first sand at 4,045 feet, second sand at 4,130 feet and McLish lime from 4,165 to 4,171 feet, total depth. The only gauge available on this producer was 129 bbls. of oil the first hour flowing through casing.

J. E. Crosbie, Inc., proposes to establish a precedent in Fitts Pool development by attempting to extend the pool something like 1¼ miles from the nearest production in the field. J. E. Crosbie, Inc., has closed a deal with Delaney, King, Miller and others to drill a well in the NE SE NW Section 27-2-7 for a one-half interest. It is No. 1 Farnham located on a 30-acre tract. After the Fitts Pool really got under way it has so far been extended a location at a time and this is the first attempt at a long range extension for the pool. Accompanying is a map showing the relative position of the No. 1 Farnham to the pool proper.

Beckham County

E. L. Martin and others have abandoned their No. 1 Robberson, C NE SE Section 1-9-22w, wildcat in Beckham County, western Oklahoma, about 9 miles east of Sayre. It had been spudded in 20 feet.

West Oak Oil & Gas Co. was drilling below 3,275 feet with gas showings in its No. 1 Murray, C W half NE SE Section 10-9-25w Beckham County. This test had a light showing of gas at 3,070 feet in dolomite formation.

Jackson County

In the Altus Pool, Gypsy Oil Co. has completed its No. 1 Southall, SW cor. Section 2-1-20w, with an initial production of 40 bbls. of oil. It is now pumping 25 bbls. daily from lime formation logged at 1,550 to 1,562 feet and 1,615 to 1,637 feet, total depth.

Gypsy Oil Co.'s No. 4 Kelly, SE NE NE, one location south of the discovery well in the Altus Pool in Jackson County, is completed in granite wash formations at 1,353-64 feet and 1,405-47 feet with total depth at 1,449 feet. The initial 24 hours' production amounted to 120 bbls. of oil.

South of the Altus Pool in Jackson County, Manson and others have abandoned at 1,480 feet their No. 1 Minor "B," NE NW NE Section 15-1-20w. A lime at 1,028 to 1,040 feet produced 4,000,000 feet of gas daily. Granite wash logged from 1,419 to 1,432 feet was estimated good for 2 bbls. of oil daily and dry granite wash was logged from 1,436 to 1,437 feet.

Carter County

Sinclair Prairie Oil & Gas Co. has evidently caught the idea of the Shell Petroleum Co. in its plan of development of an old lease in the Healdton Pool in Carter County, and this week's news shows that the former company has completed No. 28 Million & Thomas, 335 feet north and 845 feet west of the SE cor. Section 5-4s-3w, for 25 bbls. of oil daily on the pump. Production is coming from a sand drilled from 1,030-76 feet with total depth at 1,080 ft.

Amos Drilling Co. logged only a small show of oil in sand at 1,017-20 feet and its No. 1-A Ponder, NE SE NW Section 6-3s-2w, Graham Pool, in Carter County, is dry and abandoned at 1,504 feet.

Samedan Oil Co. has staked location for its No. 1 Higgins "C," SE SW SW Section 6-2s-2w, and Trevelyn Oil Co. is drilling out cement after setting 8¼-inch casing at 2,265 feet in No. 5 Mitchell, C SW SE Section 24-1s-3w, both being new operations in Carter County.

Comanche County

Westheimer & Daube's No. 2 Cox, SE cor. Sec. 13-2-10w, Hanbury Pool in eastern Comanche County, is completed for 8 bbls. of oil daily on the pump in a granite wash found from 1,598 to 1,630 feet, total depth.

Oscar Jones is rigging up rotary tools for his No. 1-A Scheets, NE SW Section 26-3-10w, a wildcat about 6 miles due north of the Hanbury Pool in Comanche County.

Cotton County

Location has been abandoned for Collum and others' No. 6 Smith in the SW NE SE SE Section 34-1s-10w, Walters Pool, in northern Cotton County, and same operators' No. 5 Smith, NW SE SE SE Section 34-1s-10w, is abandoned at 2,217 feet after getting an estimated 5 bbls. a day showing in sand at 2,166-85 feet.

Johnston County

Neff and Godfrey's No. 2 Ruthford, 790 feet north and 580 feet west of center Section 13-4s-5, Johnston County wildcat southwest of Tishomingo, topped Bromide sand at 100 feet and the test is abandoned at that depth.

Equitable Oil & Gas Co. has staked location for its No. 1 Bellsey, NE SW Section 12-2s-4, for a test of the Arbuckle limestone. This is a wildcat location near Millcreek in Johnston County.

Atoka County

T. C. Ramler and others have abandoned at 1,175 feet, their No. 1 William Roberts, SW SE SW Section 6-2s-12e, Atoka County wildcat.

Mid-Continent Petroleum Corp. and others at No. 1 Fulton, SW cor. Section 19-1s-12e, were drilling ahead in Wapanucka lime at 2,350 feet. This is one of the key tests in southeastern Oklahoma.

Another key test for southeastern Oklahoma is Malernee and others' No. 2 D. O. K. Land Co., SE cor. Section 35-2s-13, Atoka County. It is being cleaned out 800 feet off bottom of the hole at 3,136 feet after filling to within 200 feet of the top with salt water.

Coal County

Amerada Petroleum Corp. and others' wildcat, No. 1 Travelers Life Insurance Co., SW NW NE Section 28-1s-9, southern Coal County, logged Bromide lime at 4,770 feet, McLish lime at 5,115 feet, and at 5,120 feet, total depth, it was bailed down, resulting in a hole full of salt water. In drilling deeper, oil stains were had from 5,300 to 5,305 feet and 5,310 to 5,330 feet. Total depth is now 5,406 feet in McLish sand and the test, although definitely a dry hole, is to be drilled through the sand for whatever information might be obtained as a study for the area.

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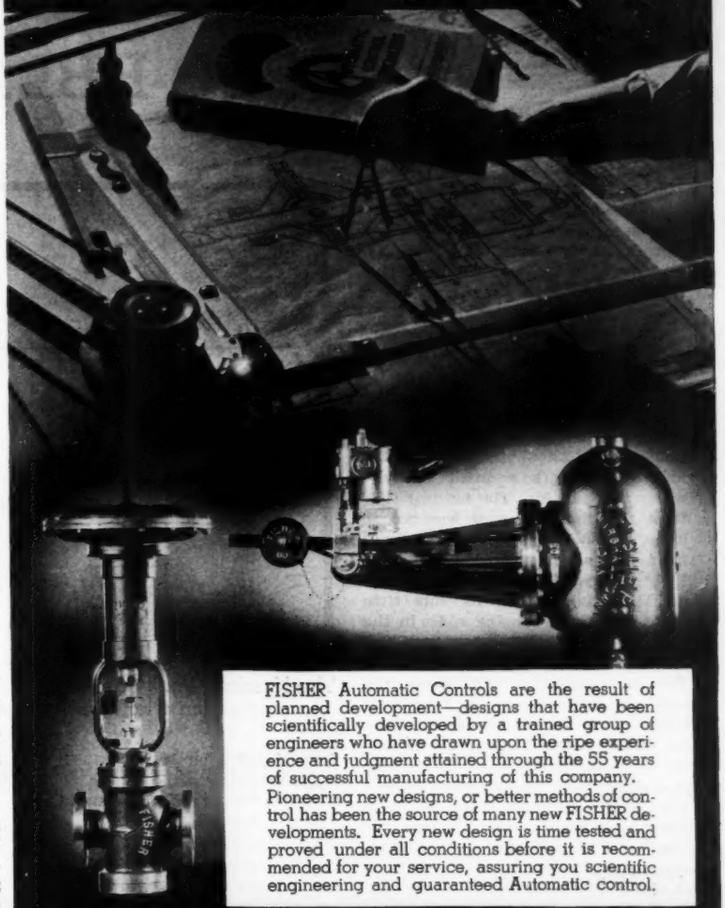

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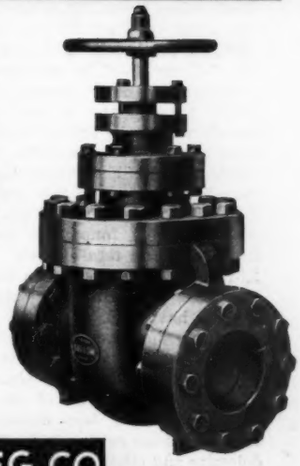

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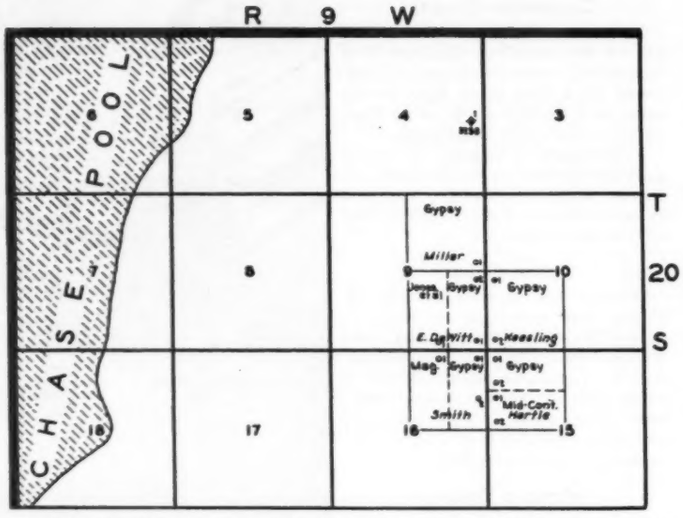
Kansas Developments

KEESLING POOL GROWS FAST; 7,900-BBL. WELL AT OXFORD

By JAMES McINTYRE

The Keesling Pool in Rice County, Kansas, is gaining in importance as an oil pool with each additional completion. Mid-Continent Petroleum Corp.'s No. 1 Hartle, NW SW NW Section 15-20-9w, pumped 1,624 bbls. of oil on its 24-hour potential test after having been treated with 1,000 gallons of acid. It is producing from the Siliceous lime encountered from 3,212-31 feet, total depth. Gypsy Oil Co. opened the pool in its No. 1 Keesling in the NW NW Section 10-20-9w in April, this year, when Siliceous lime from 3,239-67 feet yielded 238 bbls. of oil with a small show of water in 24 hours. The natural flow from the discovery well was not so large, swabbing only 3 bbls. of oil per hour but when treated twice with 1,000 gallons of acid the rate of production was tripled. At this time there are five producing wells in the pool, Gypsy Oil Co. having four and Mid-Continent Petroleum Co. one. The accompanying map shows the pool and its proximity to the Chase Pool, which also is producing from the Siliceous lime horizon and threatens to take the lead as the largest producing field in Kansas, second only to the Burrton Pool in Reno County. It is very probable that the Keesling Pool will take on a similar appearance to the Chase Pool in a northeast-southwest direction but not nearly so extensive in area.



The Keesling Pool, east of the big Chase Pool in Rice County, becomes important with added completions of good wells

Oxford Pool's Importance

The Oxford City Pool in eastern Sumner County continues to hold the attention of Oklahoma-Kansas operators by evidencing that therein lies one of the most prolific oil producing spots yet to be found in the State of Kansas. The past week witnessed what is perhaps the largest natural flowing oil well drilled in the State outside of the once great Towanda Pool, when Lario Oil & Gas Co. and Barnsdall Oil Co.'s No. 3-A Weinrich, 200 feet south and 1,100 feet west of the NE cor. NW ¼ Section 23-32-2, established a daily potential of 7,996 bbls. This is the largest and the fourth well to be drilled to the deeper pay in the pool. The fifth deep test in the pool is Shell Petroleum Corp.'s No. 3 Barnes, 660 feet north and 1,100 feet east of the SW cor. Section 14-32-2, which found the pay from 2,871-80 feet, total depth, flowing 2,517 bbls. in 24 hours. So far all of the wells producing from the lower horizon have been previously producing from shallower depths, and bits are busy in several other former producers in search of the bigger pay. At this time the name of the deeper pay zone has not been definitely determined, some calling it the Simpson dolomite and others calling it the Siliceous lime—however, it is an Ordovician section. The Oxford Pool was discovered by the Roxana Petroleum Corp. (Shell), on May 30, 1927, with a 110-bbl. well in the Stalnaker sand at 2,050 feet, in No. 1 Emerich, on Tract 5, Oxford townsite.

There is an interesting sidelight to the delayed discovery of this deeper pay horizon in the Oxford City Pool and the small initial production of the discovery well, Lario and Barnsdall's No. 4 Wenrich, NE NW NW Section 23-32-2. The Stalnaker sand has been the main producing sand in the pool since its discovery in 1927. There were no wells drilled below the Stalnaker sand pay until the Amerada Petroleum Corp. and others tested the Siliceous lime (?) from 3,555-74 feet in their No. 1 Buffington in the SE SW NW Section 14-32-2. A hole full of water was encountered in this well and owners of Stalnaker sand producers being satisfied with the yield they were then getting were contented with things as they were, the result being that no other deep tests were drilled until March, this year. Lario Oil & Gas Co. and Barnsdall Oil Co. started deepening their No. 4 Wenrich in March and the following month saw production coming from the deep pay. No. 4 Wenrich was completed for only 320 bbls. of oil as compared with the colossal gushers that followed.

In accounting for the small initial production of the discovery well it is learned that the operators contemplated reaching their objective at around 3,500 feet, or at approximately the same depth it was found in the No. 1 Buffington drilled back in 1927. And proceeding to deepen with rotary tools the operators unexpectedly encountered and inadvertently sealed off, partially, their objective at near 2,900 feet, some 600 feet shallower than where it was expected. This unfortunate circumstance is undoubtedly the cause of the comparatively small yield in the discovery well that might have been, under more favorable conditions, a large well. Finding of the Ordovician beds at 2,900 feet in the vicinity of the No. 4 Wenrich with the same section found at 2,500 feet just one-half mile to the north indicated there must be present an unconformity of unusual significance, probably more so in terms of geology than in barrels of oil. Nevertheless, oil is present in terms of gushers, the extent of which remains to be seen.

Other Operations

E. B. Shawver and others' No. 2 Morgan, NW SW NE Section 15-31-3, in the Smith Pool in Sumner County, encountered a hole full of water in the Mississippi lime from 3,100 to 3,103 feet, total depth, and it is dry and abandoned.

Washoma Oil Co. and others' No. 3-B Bussard, an old well deepened from 1,968 feet, and located in the C E half NE SW Section 36-31-2, in the Churchill Pool in Sumner County, tested a hole full of water in the Siliceous lime, total depth 2,775 feet, and plugged back to the Kansas City lime at 2,300-2,510 feet, where it is completed for 2 bbls. of oil daily.

In the Wellington Pool in Sumner County, Sinclair Prairie Oil & Gas Co.'s No. 3 Kamis, SW NW SW Section 28-31-1w, found the Chat from 3,632-95 feet, total depth, good for 138 bbls. of oil on the pump in 24 hours, after acidizing, and it is completed.

Champlin Refining Co. is underreaming the 6-inch casing at 3,152 feet in its No. 1-B Latta, SW SE NW Section 9-30-2w, Latta Pool, in Sumner County. This is being deepened from old total depth of 3,057 feet.

Crude Oil Production

Estimated daily average production of Kansas for the week ending April 17 and for the preceding week is as follows:

	Barrels	
	Aug. 17	Aug. 10
Burrton	16,825	15,775
Ritz-Canton	7,325	8,025
Hollow	3,975	3,325
Voshell	4,375	3,775
Johnson	738	1,000
Nikkel	3,350	3,100
Sedgwick County	7,975	7,675
Ellsworth County	9,148	8,770
Barton County	2,542	2,342
Rice County:		
Chase Pool	15,350	16,175
Raymond Pool	2,625	3,050
Remainder	6,264	5,985
Ellis County	526	507
Kingman County	642	770
Stafford County	1,516	1,470
Russell County	13,525	12,150
Greenwood County	10,500	10,500
Butler County	18,800	18,860
Other pools	16,474	16,053
Total Kansas	142,475	139,250

Scott County

Atlantic Oil Producing Co.'s No. 1 Dague, C SW NE Section 14-20-33w, Scott County, had the Mississippi lime from 4,629-46 feet, total depth, which produced 25 bbls. of oil per hour on the swab after a 10-quart shot of nitro. It is to be acidized. This well is an east offset to Atlantic's No. 1 Vaniman, discovery well, which initialed 572 bbls. of oil from the same horizon.

Rice County

Gypsy Oil Co.'s No. 1 Coffman, NW SW Section 5-20-9w, Chase Pool, in Rice County, has been completed for 721 bbls. of oil and 300 bbls. of water after acidizing with 1,000 gallons the Siliceous lime from 3,238-47 feet, total depth.

Three Rivers Oil Co.'s No. 1 Buehler, wildcat test in the NW cor. Section 17-18-8w, northern Rice County, logged Kansas City lime at 2,895 feet. At 2,913 feet a show of oil was had and at 2,925 feet it was estimated at 1 bbl. of oil per hour. At 2,987 feet a hole full of water was had and it is now being cleaned out after setting the 8-inch casing at 3,007 feet, total depth.

Phillips Petroleum Co.'s No. 1 Gouldner, SW NW NE Section 16-18-9w, east offset to the discovery well of the Gouldner Pool in Rice County, drilled 7 feet of Siliceous lime topped at 3,230 feet and swabbed 297 bbls. of oil and 255 bbls. of water in 24 hours. It was not a completion, however.

Two new wildcat operations were started in Rice County the past week and six inside operations were begun, making Rice County the leader for the week in new starts.

Aylward and others were moving in material for No. 1 Haas in the NE NW NE Section 4-19-10w, for a Sili-

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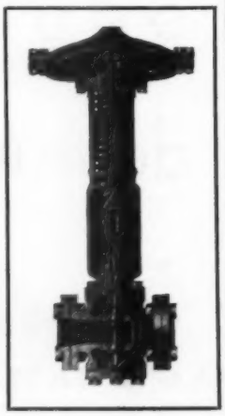

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ceous lime test. This location is about 2 miles northwest of the Brandenstein Pool, and a wildcat.

J. M. Hurd's No. 1 Wright, NE cor. Section 36-21-7w, is a wildcat location about 4 miles south of the Thode Pool in southeastern Rice County.

Other new operations in Rice County follow: Gypsy Oil Co.'s No. 2 Smith, NE SE NE Section 16-20-9w, building rig; Mid-Continent Petroleum Corp.'s No. 2 Hartle, SW NW Section 15-20-9w, location; Gypsy Oil Co.'s No. 2 Hartle, SW NW NW Section 15-20-9w, building rig; Sinclair Prairie Oil & Gas Co.'s No. 1 Graham, SW SE Section 16-20-10w, moving in material; Phillips Petroleum Co. and Indian Territory Illuminating Oil Co.'s No. 3 Krampe, SW SE Section 31-19-10w, moving in material; C. B. Davis and others' No. 5 Dueser, SE SW Section 31-19-10w, rig.

Ellis County

Tom Palmer and Storm King Oil Co.'s No. 1 Ruder, SE NE NW Section 17-15-18w, wildcat 9 miles south of Hays in Ellis County and on the east flank of the Yocemento Ridge, has been officially completed as a discovery well in the Oswald lime, 3,243-3,429 feet, total depth, pumping 499 bbls. of oil in 24 hours on the pump.

Helmerich & Payne, Inc., and others' No. 1 Kuhn, NW SW NE of Section 16-14-20w, a wildcat in Ellis County southwest of Hays and on the west flank of the Yocemento Ridge, was drilling ahead at 3,785 feet after cementing the 7-inch casing at 3,547 feet and setting 187 feet of 5-inch liner at 3,710 feet. Top of the Kansas City lime was logged at 3,498 feet and a show of oil was indicated in a core from 3,547-50 feet. After cementing the 7-inch casing the plugs were drilled and at 3,555 feet there was a show of oil and water. At 3,658 feet there was a show of free oil.

Barton County

Continental Oil Co.'s No. 1 Risse, SE cor. Section 36-19-11w, Barton County, is a completion in the Siliceous lime 3,275-82 feet, total depth, pumping 1,258 bbls. oil in 22½ hours, and it extends production in the Steckel Pool to the west.

W. E. Witt's No. 1 Murry, NW SW Section 14-17-14w, wildcat location in north central Barton County, is a cellar and Torry and Feaster and others were drilling at 405 feet at No. 1 Kimpler, SE NE NE Section 31-18-11w, a wildcat just starting up in eastern Barton County.

Ellsworth County

The Skelly Oil Co.'s No. 1 Dees, NE SW Section 14-17-9w, brought in the largest producer in the Lorraine Pool of Ellsworth County to date. Siliceous lime from 3,185-87 feet, total depth, was good for 2,140 bbls. of oil naturally on a 24-hour potential test. The No. 1 Dees was not acidized and extends production one location to the west. It was completed on the pump.

The Carter Oil Co. has abandoned location for No. 1 Soeken, NW SE Section 26-17-9w, South Lorraine Pool in Ellsworth County. A study of this pool indicates that production in paying quantities at this location is unlikely since the north offset, No. Williams, was completed for only 98 bbls. of oil and a like amount of water. The west side of this pool appears more favorable for production.

New operations started in Ellsworth County during the week under review were confined to the Lorraine and South Lorraine Pools. Empire Oil & Refining Co.'s No. 11 Rolfs, NW SW NW Section 14-17-9w, was a new location and materials were being moved in. Skelly Oil Co. had staked location for its No. 4 Dees in the SE SW Section 14-17-9w, and Phillips Petroleum Co.'s No. 3 Melchert was a location in the NW SW NE Section 23-17-9w. In the South Lorraine Pool materials were being moved in for Carter Oil Co. and others' No. 3 Teubner, 440 feet north and 1,320 feet west of the center of Section 26-17-9w.

Graham County

Helmerich & Payne, Inc., and Skaer Oil Corp. were drilling ahead in the Mississippi lime at 4,137 feet in their No. 1 Stites, C SW SW of Section 8-10-22w, a wildcat 8 miles northwest of production in the Wakeeney Pool, in Graham County.

Harvey County

Olson Drilling Co. was building rig for No. 3 Krehbiel in the SE SW Section 19-23-3w, on the east side of the Burrton Pool in Harvey County.

Charles Nye and Sinclair Prairie Oil & Gas Co. had cellar dug for their No. 1 Gouldner, SW SE Section 19-23-3w, east side of the Burrton Pool in Harvey County.

McPherson County

In the Ritz Pool in McPherson County, Shell Petroleum Corp. plugged back from the Viola lime in its No. 3 Finkle, NW NE NW Section 23-19-2w, and completed it in the Chat 2,899-2,979 feet, for 230 bbls. of oil on the pump after acidizing with 1,000 gallons.

McPherson Oil & Gas Co.'s No. 3 Chindberg, SW NW Section 32-18-2w, McPherson County is completed in the Kansas City lime 2,314-24 feet, total depth, pumping 230 bbls. of oil for a four-day average.

The only new operation in McPherson County during the past week is Skelly Oil Co. and others' No. 2 Johnson, SE cor. Section 30-18-2w, which was being rigged up.

Harper County

Kessler and Their and others' No. 1 Wilfje, a Harper County wildcat east of Anthony, and located in the SW NE Section 17-33-6w, had top of the Wilcox sand logged at 4,855 feet and a core taken from 4,858-61 feet indicated salt water. It was being drilled ahead at 4,947 feet.

Pratt County

In Pratt County, Skelly Oil Co. and others' No. 1 Krehbiel, SE NE NE Section 25-27-11w, west edge of the Cunningham Pool, encountered Kansas City lime from 3,426-70 feet, total depth, and is completed for 155 bbls. of oil on the pump.

Reno County

In the Abbyville Pool in central Reno County, Duwe and others' No. 1 Mildren, C SW SE Section 24-24-8w, found the Kansas City lime from 3,190 to 3,550 feet, total depth, good for 107 bbls. oil daily on pump and it is a completion for the week.

A new operation for the Abbyville Pool in Reno County is Siegrist and Miller's No. 1 Love, C W half SW SE Section 13-24-8w, where material was being moved in on the ground.

Other new operations in Reno County were in the Stone Pool south

of the Burrton Pool. They were: The Texas Co.'s No. 1 Collins, C NE NW Section 16-24-4w, building rig, and Phillips Petroleum Co. and others' No. 1 State Bank, C SE SW Section 10-24-4w, building rig.

Russell County

Skelly Oil Co. at No. 1 Weeks, NE SW Section 34-15-13w, Sellens Pool in southern Russell County, found Siliceous lime from 3,318-23 feet, total depth, and it is completed on the pump for 291 bbls. of oil the first 24 hours.

Barnsdall Oil Co.'s No. 1 Krug, SW NE Section 34-15-13w, Sellens Pool, Russell County, pumped 592 bbls. of oil and 225 bbls. of water the first 24 hours and is completed in the Siliceous lime logged from 3,324 to 3,328 feet, total depth. This test was acidized with 1,000 gallons.

In the Sellens Pool of southern Russell County, Phillips Petroleum Co. encountered Oswald lime from 3,060-99 feet, total depth, in its No. 1 Sellens, which potentialed 282 bbls. of oil and a considerable amount of water in 24 hours on its completed gauge. This well extends the Sellens Pool one-half mile south.

Vernon and Murphin, operators at No. 1 Becker, a wildcat in southern Russell County in the NE cor. Section 32-15-14w, topped Siliceous lime at 3,390 feet, had oil showings at 3,390-93 feet and 3,405-07 feet and 3,409-12 feet but encountered a hole full of water from 3,412 to 3,429 feet, total depth, and the test is abandoned.

Gypsy Oil Co. completed its No. 3 Neidenthal, NE SE SE Section 14-14-15w, in the Neidenthal Pool of western Russell County, for 582 bbls. of oil and 125 bbls. of water in the Siliceous lime drilled from 3,256½-65 feet, total depth.

Sedgwick County

Dickey Oil Co.'s No. 3 Lohkamp, SE SW N WSection 20-28-1, Robbins Pool in Sedgwick County, is completed in the Chat 3,087-3,116 feet, total depth, where it was acidized with 2,000 gallons to yield 226 bbls. of oil the first 24 hours on the pump.

Derby Oil Co. and others' No. 1 Bartholomew, SW NW Section 8-27-4w, western Sedgwick County wildcat 5 miles southwest of the Hilger Viola lime pool, had topped Viola lime at 4,016 feet and drilled to 4,027 feet, total depth. The 6-inch casing is cemented at 4,016 feet and the well is being cleaned out.

T. C. Johnson and Atlantic Oil Producing Co. staked location during the week for their No. 1 Jones Estate, NW NE NE Section 29-28-1, Robbins Pool in Sedgwick County.

Butler County

Phillips Petroleum Co. has completed its No. 13 Peck, C SW ¼ Section 20-23-4, in the Elbing Pool in Butler County, getting pay in the Hunton lime logged from 2,403-05½ feet, total depth, pumping 31 bbls. of oil daily on a four-day test.

Greenwood County

In the Hamilton Pool of Greenwood County, Lykes and others' No. 4 Davis, 800 feet north and 1,050 feet east of the SW cor. SE ¼ Section 6-24-12, tested dry Mississippi lime from 1,811-55 feet, total depth, and the test is abandoned.

Siefkin and others' No. 1-A Day, NE NW SW Section 33-27-11, southern Greenwood County, is dry and abandoned at 1,473 feet, total depth.

Lee Tippy and others' No. 2 Stonebreaker, NW SE SE Section 32-27-11, southern Greenwood County, is a new operation for the week and spudding has been started.

Elk County

Minnehoma Oil & Gas Co. has completed its No. 5 Ferguson, 907 feet north and 660 feet east of the SW cor. Section 3-31-8, western Elk County, Kansas City lime from 1,940-67 feet, total depth, yielding 25 bbls. of oil on its initial day's pumping test after being treated with 1,000 gallons of acid.

Woodson County

Connell and Marshall, somewhat unexpectedly, surprised observers when their No. 1 Klick, SW NW SW Section 20-25-14, western Woodson County, flowed 548 bbls. of oil in 24 hours from a sand logged from 1,390-1,437 feet, total depth, thought to be the Bartlesville. This test is surrounded on nearly all sides by dry holes but is situated on a trend coming down from the Virgil Pool to the southeast where a "shoestring" pool reaches out for several miles and where dry holes and oil wells are common neighbors. However, the No. 1 Klick is a mile ahead of production and a nice well and interest in this old area should be revived.

There were three new operations started in Woodson County during the week under review, two of which were in the vicinity of the Connell & Marshall No. 1 Klick. Coulter and others were drilling below 100 feet at their No. 1-A Rogers, NE NW NE Section 23-25-14, and Reynolds and others' No. 1 Nordmyer, SW NW NW Section 19-25-14, was drilling below 500 feet.

Charles Sheedy's No. 1 Snattinger, C E half NE NE Section 3-26-14, is a wildcat in southern Woodson County southwest of Yates Center about 9 miles, a new operation for the week, is shut down at 200 feet.

Cowley County

Three miles southeast of the Rock Pool in Cowley County, Baden, Johnson, Roth and Farrout's No. 1 David, a wildcat, NE SW Section 35-30-4, logged Bartlesville sand from 2,953-73 feet, filling the hole with oil in 12 hours. On a test it swabbed and flowed 55 bbls. of oil in 12 hours. It was being cleaned out after a 40-quart shot of nitroglycerin.

Independent Marketers

The Independent Petroleum Marketers Association (of Oklahoma) at its last general meeting elected a new board of directors. For the purpose of representation the state was divided into three sections. Eastern section directors are J. J. Basolo, McAlester; L. B. Abbott, Durant; R. E. Copeland, Tulsa; central section, A. W. Lee, C. E. Sloane, and E. C. Chech, of Oklahoma City; western section, A. H. Holland, Enid, and R. H. Winget, Cushing.

Lacey Walker, secretary of the American Petroleum Institute, will arrive in Los Angeles, Calif., this week. He will confer with local committees in regard to preparations for the annual meeting of the Institute to be held in Los Angeles, November 11 to 15.

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Eastern Field Report

By STAFF CORRESPONDENT

GAS SHOW IN THE ORISKANY STIRS INTEREST IN ELK AREA

PITTSBURGH, Pa., Aug. 19.—A showing of gas in an Oriskany sand test has stirred interest in the Elk district of West Virginia. A new location for a deep test in southeastern Ohio and tests spudding in Southwest Pennsylvania were other contributions to the week's news.

Nineteen completions were reported. Five were dry holes, six were gassers, and eight were producers with an initial production of 160 bbls. Most of the new production was in Southeast Ohio, where the ratable under contracts continues at 50 per cent of normal.

SOUTHEAST OHIO

In Columbiana County, Southeast Ohio, another deep test will soon start drilling. On the Nila McIntyre farm in W half NE Section 28, Madison Township, Robert Cushing and others have made a location and are building a rig for a test scheduled for the Oriskany sand. It is located about a half mile north and west of Glasgow on the Glasgow anticline. It is northeast of the good Oriskany sand gas well on the Wiliam Jenkins farm in Section 30. The top of the Oriskany sand in this test was at 4,543 feet.

The other schedulled deep test in Southeast Ohio is now drilling. In Section 21, Brush Creek Township, Brookes Johnston and others have started drilling on the Clyde Smith farm.

Several producers were completed in Southeast Ohio during the week. In Harrison County, in the old Adams Field, C. B. Worstell completed No. 7 on the Adam Dunlap farm in Section 15, Archer Township, in the Berea sand at a depth of 1,438 feet. It produced 10 bbls. the first day after being shot.

In Jefferson County the Peoples National Bank & Trust Co. of Marietta Account No. 57 completed No. 11 on the Jess Stevens farm, mapped as the Wayne Coal Co. tract, in NE Section 27, Island Creek Township. It was drilled in the Berea sand to 1,400 feet and produced 2 bbls. the first day after being shot. It is about 600 feet outside of old developments.

In Knox County, J. B. Reed completed a test on the Willis Parson farm in Section 6, Pike Township, in the Clinton sand at a depth of 2,625 feet. It produced 65 bbls. the first day, natural. It will not be shot at present as it is producing about 40 bbls. a day. There was 11 feet of sand, and although drilled deeper no more was found.

In Licking County there were two completions and a dry hole. In the NW Section 14, Fallsbury Township, George H. Long Account No. 6 completed a second test on the William Varner farm in the Clinton sand at a depth of 2,957 feet. It produced 52 bbls. the first day after a shot. In the southwest quarter of this section the Blue Rock Oil & Gas Co. completed No. 7 on the J. N. Freeze heirs farm through the Clinton sand to a depth of 2,970 feet and it was dry. In Perry Township, Section 17, the Hope Construction & Refining Co. completed a test on the Delphia A. Elliot farm in the Berea sand and it produced 12 bbls. the first day after a pack shot. It will make a 2-bbl. pumper at 653 feet.

In Medina County the Oko Oil & Gas Co. completed No. 14 on the Celesta Richards farm in Section 1, Chatham Township, in the Berea grit at 505 feet. It produced 2 bbls. the first day after a shot. On Tract 1, Lot 3, of this township, E. R. Edson & Son Co. completed No. 33 on the W. H. Wideman farm through the Berea grit to 543 feet. It was dry.

In Vinton County Kelch Brothers and others completed a second test on their own property in Section 29, Brown Township, near New Plymouth, in the grit at a depth of 1,011 feet. It produced 3 bbls. the first day, natural, which increased to 12 bbls. after a shot.

SOUTHWEST PENNSYLVANIA

There were two gas wells and three dry holes in Southwest Pennsylvania during the week and added reports of new drilling. Both of the deep tests to go to the Oriskany sand have started drilling. They are the test of the Carnegie Natural Gas Co. on the Gertrude Scott farm in South Shenango Township, Crawford County, and the test of John Galey and others on the William Graham farm on Brush Run in South Beaver Township, Beaver County.

In Amwell Township, Washington County, the Manufacturers Light & Heat Co. completed the second test on the R. A. Rankin farm at a total depth of 2,779 feet. The top of the Thirty-foot sand was at 2,700 feet with about 300,000 feet of gas showing at 2,739-2,745 feet. In this township the Carnegie Natural Gas Co. drilled down the No. 1 on the T. N. Shrontz farm to a total depth of 2,943 feet and it was dry. The Gordon Stray sand was at 2,706-17 feet, the Gordon sand at 2,743-50 feet and the Fifth sand at 2,886-2,908 feet. The well was plugged.

In Amwell Township also the test of the Carnegie Natural Gas Co. on the R. M. Carrons farm is shut down at 2,725 feet. The Manufacturers Light & Heat Co. is down 2,783 feet on the C. and S. L. Hazlett farm. The top of the Thirty-foot sand was at 2,779 feet with about 13,000 feet of gas showing at 2,781 feet. The Wise Oil & Gas Co. is down 520 feet in the No. 2 on the Kelsey farm.

In West Bethlehem Township, Washington County, H. D. Freeland & Co. completed a test on the Winfield McCarty farm at a total depth of 1,443 feet. The gas sand was struck at 1,336 feet and gas having a volume of about 160,000 feet a day at a depth of 1,338 feet.

In Cecil Township, Washington County, a test trying to extend production proved a failure. J. L. Morris & Co. drilled to a total depth of 2,575 feet, through the Fifth sand, on the J. A. Augerer farm and it was dry in all formations.

In Peters Township, Washington County, also an extension test, W. A. Lindsay and others drilled a test on the Samuel Van Eman farm to a depth of 2,514 feet, through the Fifth sand and it also was dry.

In North Franklin Township, Washington County, E. H. and J. B. Tague have started drilling a second test on the E. H. and Elizabeth M. Grim farm. In South Franklin Township the New Oil & Gas Co. is building a rig for a test on the W. Dodd farm. This will be an extension of production recently struck on the Tucker heirs and Phelan farms.

In Greene County, the Carnegie Natural Gas Co. is drilling at 2,120 feet on the J. B. Orndoff farm in Center Township. Here the Rutan Oil Co. is rigging up for No. 3 on the C. T. Harvey farm and will spud in next week.

In Jefferson Township, Greene County, the Peoples Natural Gas Co. is down 2,200 feet in deepening its No. 1 on the William King farm. The top of the Big Injun was at 2,086 feet, with about 242,000 feet of gas showing at 2,194 feet.

In Dunkard Township, Ira Donley is drilling at 190 feet on his test of his own property. In Richhill Township, Wasmuth & Callahan are filling the hole on the Daniel Goodwin farm with cement to drill by.

In South Union Township, Fayette County, William Snee and others have drilled by lost tools in the test on the Summit Hotel property on Chestnut Ridge. The tools were lodged at about 3,961 feet and the hole is now past the 4,000-foot level.

WEST VIRGINIA

The feature of West Virginia was the showing of gas in the Oriskany sand in a test in Elk district, Kanawha County. The Columbian Carbon Co. in its test on the G. and D. Copenhaver farm reached the top of the Corniferous lime at 4,706 feet. The top of the Oriskany sand was at 4,820 feet. Twelve feet in the formation the sand was dry. Gas was struck below that which had a volume, natural, of about 250,000 feet a day. The gas is wet. Drilling is being continued and the depth reported was 4,845 feet.

In Loudin district, Kanawha County, Godfrey L. Cabot, Inc., struck a surprise in the test originally scheduled for the Oriskany sand on the Kanawha Land Co. lease. At a depth of 3,650 feet, the brown shale formation, gas was struck with a volume of about 700,000 feet a day which blew down in 24 hours to about 500,000 feet. The well was shut in and the rock pressure was 500 pounds and increasing. No attempt will be made to drill deeper and the well will be completed at this depth. In this district the Columbian Carbon Co. is drilling at 3,030 feet on the Kanawha City Co. deep test.

In the Malden district, Kanawha County, Godfrey L. Cabot, Inc., has reached a depth of 4,325 feet in the deep test on the Plus R. Levi farm. The same operator is drilling at 4,780 feet in his No. 7 on the Campbells Creek Coal Co. lease. Here on the Katherine Scott farm South Penn Oil Co. is at 1,200 feet in the deep test.

In Elk district, Kanawha County, the Yoak Oil & Gas Co. is shut down for a new cable in the test on the W. T. and J. H. Goshorn farm at 4,813 feet. The top of the Corniferous lime was at 4,701 feet and the top of the Oriskany is expected at about 4,818 feet. In Malden district, the Columbian Carbon Co. is drilling at 4,550 feet on the W. D. Lewis farm.

In Jefferson district the deep test of Benedum & Trees on the Joseph Hill farm is drilling at 5,800 feet. At 5,620 feet there was a reported showing of oil in the hole good for a barrel a day. At 5,760 feet in a Lime formation, some gas was struck which blew out in two hours. The location is about 2½ miles south of Spring Hill.

Completed Wells

Only one producer was completed in West Virginia, and it was a gas well drilled deeper. On Mill Creek in Curtis district, Roane County, Kenny M. Hunt and others drilled the T. J. Murray test deeper in the Salt sand and it is producing 5 bbls. a day.

In Gilmer County, J. W. Cunningham and others completed a test on the Lee and Ola Gainer farm in DeKalb district in the Injun sand at a depth of 1,850 feet. This was dry but there is about 220,000 feet of gas a day from the Salt sand.

In Ritchie County, Clem Morris and others completed a test on the Joseph Mathers farm at 2,079 feet. There was 142,000 feet of gas a day from the Maxon sand, and lower sands showed dry. This is located in Murphy district. In this district, Creed Barker completed No. 5 on the W. P. Barker farm in the Big Injun sand at 1,810 feet. It is a gas well gauging about 134,400 feet daily.

Other Operations

In Boone County, the Pure Oil Co. is spudding in No. 76 on the Federal Coal Co. tract in Sherman district.

No. 75 is drilling at 1,946 feet and No. 74 at 3,046 feet. This company is building a rig for No. 9 on the Robson and Prichard lease, same district.

In Cabell County, Guyandotte district, R. J. Petry and others are drilling at 2,525 feet on the Virginia Powell lease. Lee Sansom and others are down 450 feet on the F. L. Whitaker farm. The Merrits Creek Gas Co. has reached 240 feet on the Monel Land Co. lease. In McComas district Martin & Swanson are fishing at 1,250 feet on the Henry Childers farm; R. H. Adkins, trustee, is drilling at 1,875 feet on the J. M. Fellure farm; the West Virginia Gas Co. is down 2,325 feet on the George W. Savage lease; the Toms Creek Gas Co. is at 1,700 feet on the C. W. Meelingh farm; R. H. Adkins and others are running casing at 1,275 feet on the H. S. Fraley farm; and W. C. Kingery and others have started drilling and are at 200 feet on the Sarah E. Midkiff farm.

In Calhoun County the Simmons Gas Co. has made a location for No. 3 on the Sylvester Brannon farm in Lee district. H. S. Adams and others are down 1,600 feet on the Ruby Smith farm. Morley Oil & Gas Co. is at 700 feet on the George McKee farm. The Mudlick Oil & Gas Co. is down 2,125 feet on the G. W. Bennington farm. In Sherman district, Paul Weekley is spudding in a test on the Albert Kight 26-acre tract. In Center district A. H. Jackson is drilling at 1,750 feet the test on the E. R. Fluharty farm. In Washington district Earl Knotts is down 1,125 feet on the H. H. Bennington farm, a test. Massey and Jarvis are drilling at 1,390 feet on the Hoke Jarvis farm. Harley Jarvis and others have reached 400 feet on the L. H. Crookshank farm. In Sheridan district the Richter Oil Co. is drilling at 400 feet on the Emily McCray farm.

In Clay County the Virginian Gasoline & Oil Corp. has part of the material on the ground for No. 4,562 on the Brown, Goshorn & Swann lease in Henry district. This has been a very productive lease.

In Gilmer County Coleman & Hamilton have part of the material on the ground for a test on the A. Gainer farm in DeKalb district. A. E. Ellis and others have a rig standing on the Ola D. Ware farm. In Center district Park Bowser has spudded in the No. 10 on the Dora E. Ramsburg farm. Hope Construction & Refining Co. is down 2,720 feet in the K. C. Simmins test. Starcher & Richards are at 1,380 feet on the R. Ritchey farm.

In Kanawha County the United Fuel Gas Co. has made a location for No. 4,268 on the S. L. Casey and others farm in Big Sandy district. In Poca district W. O. Ziebold and others have located a test on the D. A. Griffith farm. In Cabin Creek district Godfrey L. Cabot, Inc., is drilling at 2,685 feet on the A. D. Huntington No. 49.

In Logan County the Boone County Coal Co. has started drilling No. 4 on its own property in Logan district. The Southeastern Gas Co. is down 1,650 feet in a test on the G W. Mitchell farm, same district.

In Marion County Victor E. Tennant is drilling at 250 feet the test on the J. T. Talkington farm in Lincoln district. In Monongalia County the Carnegie Natural Gas Co. has made a location for a test on the F. M. Shearer farm in Cass district. In that district this company has the C. H. Brand test drilling at 1,710 feet and one on the Katherine Cook farm drilling at 2,822 feet.

In Ritchie County Frank Finley has a location for a second test on the Minnie Gilpen farm in Clay district. In Pleasants County Smith & Hendershot are drilling at 500 feet in the J. J. Simonton test in Lafayette district.

Canadian Fields

Commercial Oil Possibilities Seen in Southernmost Tests

By VICTOR LAURISTON

CHATHAM, Ontario, Aug. 17.—In the Turner Valley Field, southern Alberta, Renfrew Royalties' No. 1, Morris & Goodfellow, LSD 3, Section 28-18-2w5, has resumed after setting 8-inch casing in the upper Dalhousie formation at 5,540 feet. On resuming after standing cemented, some 2,000 feet of light crude was bailed, and there are possibilities of commercial crude in the lower Dalhousie before the Madison lime is reached. It is expected to get the Madison in a few weeks. It is the southernmost test now drilling on the west flank of the structure. Farther south in the same section, British Dominion Oil & Development Corp.'s No. 4, LSD 6, is in the Madison limestone below 5,983 feet. It got the Madison at 5,838 feet, proving the structure a considerable distance south and west of the nearest production.

Pacalta Oils' No. 1, LSD 7, same section, was shot in the naphtha horizon with 260 quarts. It bridged after the shot, but later cleared itself and is being given production test. There was a considerable increase in wet gas.

In North Turner Valley, Model Oils' No. 3, LSD 1, Section 22-20-3w5, is below 3,260 feet. Farther west and south, Phillips Royalties' No. 1, LSD 16, Section 16-20-3w5, is running 16-inch casing preparatory to resuming from 1,400 feet. Location is about a mile west of the proven North Turner Valley area.

Tests in the Foothills

On the Moose Dome structure west of Calgary, Moose Oils' No. 2, LSD 8, Section 29-22-6w5, is below 124 feet and preparing to set surface casing.

South of Turner Valley, Maple Leaf Royalties' No. 1 Banner, LSD 6, Section 34-17-3w5, on the Highwood-Sinclair structure, is deepening from 2,105 feet after cementing to overcome caving above the Home sand. There is considerable gas and the log checks satisfactorily with Turner Valley wells, though the formations are a little thicker. Farther south, on the Pekisko structure, the Pekisko Hills Co.'s No. 1, LSD 6, Section 6-17-2w5, is in the Madison limestone below 2,980 feet.

On the Watson structure, north and west of Lundbreck, Mar Jon Oil Co.'s No. 3, LSD 3, Section 4-10-2w5, is in the Blairmore formation below 2,696 feet with 13-inch hole, and will cement casing around 2,800 feet. Raven Oils' No. 1, LSD 1, Section 20-9-2w5, is running casing preparatory to resuming from 1,225 feet. Mar Jon-Maxmont's No. 4, LSD 10, same section, is resuming after a fishing job, around 2,100 feet.

In the old Oil City Field, Waterton Lakes Park, Oil City Royalties' No. 1, Section 30-1-30w4, has resumed from 2,140 feet. Contract for completion of the test has been let to W. A. Keyes. Oil shows have been met in five different horizons, the first at 500 feet, and there is some gas.

East of the Turner Valley Field, on the Aldersyde structure, Ranchmen's Gas & Oil Co.'s No. 1, LSD 16, Section 13-20-28w4, is below 6,455 feet with continuing shows of oil and gas. Farther north, on the New Valley structure, New Valley Oil Co.'s No. 1, LSD 4, Section 6-21-2w5, is deepening from 2,500 feet after running 10-inch casing. It is reported checking closely with Turner Valley wells. E. H. McLeod is in charge for the McLeod Oil Co. of Calgary which is completing the test.

East Central Alberta

In the Vegreville district, Vegreville Gas Utilities Co.'s No. 1, Section 14-36-51w4, is below 293 feet on a test for natural gas.

Alberta Border Fields

In the Taber district, southern Alberta, Plains Petroleum's No. 1, Thomas Engleston farm, LSD 12, Section 25-9-14w4, is rigged ready to spud. On the Del Bonita structure, Terminal Oil Co.'s No. 1, NE Section 18-1-21w4, is standing cemented at 4,894 feet. On the Twin River structure south of Lethbidge, E. H. Rosenbug's No. 3 Twin River, LSD 9, Section 10-2-20w4, has derrick up. There has been some new filing on Del Bonita acreage recently, Bruce Taylor, Thomas Rouke and Joseph Whalley having leased about two and one-half sections, including NE Section 27 and SE and NW Section 1.

Canmont Exploration Co., subsidiary of London Pacific Exploration Co. of Vancouver, British Columbia, is preparing to start a test on the Winnifred structure in Montana. Location has been made on the Scarff Dome.

Alberta operators are awaiting results of production test of J. H. Hamilton and others' No. 1, Section 10-37-5e, on the Flat Coulee structure in the first township south of the international boundary. It has been treated with acid and has about 1,800 feet of fluid in the hole. If commercial production develops some testing will likely be done on the Alberta end of the structure.

British Columbia

In the Flathead Valley, southeastern British Columbia, Columbia Oils' No. 1 is below 4,220 feet with some gas.

Lloydminster Field

In the Lloydminster Field, western Saskatchewan, Colony Oil & Gas Co.'s No. 2 has spudded. Location is about a mile almost due south of Colony's No. 1, Section 25-49-27w3, brought in about three weeks ago with a measured flow of 42,800,000 feet a day and 410 pounds rock pressure. Gas from No. 1 is being used for drilling fuel.

Drilling In Ontario

In the Dover Field, Kent County, Ontario, Prairie Oil & Gas Co.'s No. 4, Stephens farm, Lot 2, Front Concession, Dover East Township, has been deepened to about 40 feet below the break in the Trenton limestone without increasing the gas flow. It had a settled flow of 500,000 feet a day from above the break, and will probably be shot in that horizon.

In the same field, Central Pipe Line Co.'s No. 2, Joseph Sterling farm, Lot 1, Front Concession, Dover East Township, is below 2,800 feet, and getting close to the Trenton limestone. E. P. Rowe's No. 1, Vital Duphette farm, W half Lot 2, Concession 4, is below 1,400 feet. E. P. Rowe's No. 1 Bruette, Lot 5, Front Concession, Raleigh Township, is below 1,100 feet.

In the DeClute Field, Kent County, Union Natural Gas Co.'s No. 29, Lot 18, Concession 14, Raleigh Township, is around 1,000 feet. Location is in the north end of the DeClute Field, and about 3 miles south of the Olga Oil & Gas Co.'s wells.

May Enter Turner Valley

Negotiations in progress for some weeks may result in the British American Oil Co. taking a more active interest in Turner Valley development and production. The company, whose refining and marketing activities were originally centered in eastern Canada with refineries at Toronto and Montreal East, has lately been extending into the Canadian West, acquiring and enlarging refineries at Coutts, Alberta and Moose Jaw, Saskatchewan. It has several hundred retail and distributing outlets in the western provinces and ranks second only to Imperial Oil, Ltd., as a distributor of petroleum products in western Canada.

Till recently British American Oil Co. has secured practically all its crude requirements from Montana and other United States fields, crude being piped to Coutts, Alberta, and thence transhipped by tank car to Moose Jaw. A short time ago a small plant was established on the Pacalta lease in South Turner Valley. The present negotiations are understood to contemplate the acquisition or establishment by the British American Oil Co. of a refinery at Calgary and the acquisition of the Gas & Oil Products, Ltd., gasoline absorption plant in South Turner Valley. The British American company is not expected to engage in active drilling, but may assist some of the independent companies to finance drilling operations.

WILDCAT OPERATIONS

OKLAHOMA WILDCATS

Week Ending August 17

NORTHERN OKLAHOMA

Alfalfa County

Tex-O-Kan Oil Co.'s No. 1 Acre, C SW NE Sec. 14-24-11w.
T.D. 6,460 ft. Plugged back with 225 sacks cement, S.D. for water.

Beckham County

E. L. Martin et al's No. 1 Robertson, C NE SE Sec. 1-9-22w.
Spudded and abnd.

Star Oil Co.'s No. 1 Blair, C NW SE Sec. 33-9-24w.
Rig and tools.

Blaine County

Earl Ingraham et al's No. 1 Masters, SW NW NW Sec. 27-16-11w.
S.D. 1,240 ft.

Caddo County

Denver Prod. & Ref. Co.'s No. 1 Sah-Can, C SE SE Sec. 33-10-10w.
Lost circulation at 8,330 ft.; running Schlumberger test.

H. W. Lee et al's No. 1 Stacey Ferrell, SW NE NE Sec. 3-6-13w.
T.D. 2,506 ft.; pulling 6-in. and 8-in. csg.

F. A. Turner et al's No 1 Spain, NE NE SW Sec. 1-5-11w.
Sand 2,972-91 ft.; running core barrel.

Cleveland County

Arab Pet. Co.'s No. 1 McKiddy, SE SE NW Sec. 16-7-1.
Drlg. 5,101 ft.

Hall-Briscoe, Inc.'s No. 1 Fant, SW SW NE Sec. 27-10-2w.
Drlg. below 4,600 ft.

Coal County

Amerada Pet. Corp. and Stanolind Oil & Gas Co.'s No. 1 Traveler' Life, SW NW SE Sec. 28-1s-9e.
At 5,120 ft. in McLish; flowed salt wtr.; coring at 5,406 ft.

Carter Oil Co. et al's No. 1 Thompson, C S½ NE NW Sec. 34-2-9.
T.D. 4,935 ft.; making a drill stem test.

Comanche County

Oscar Jones' No. 1-A Scheets, NE SW Sec. 26-3-10w.
Rigging up rotary.

Garvin County

Charles Carter and W. S. Key, Inc.'s No. 1 Wood NW SW SE Sec. 5-4-3e.
S.D. 2,405 ft.

Grant County

Heimerich & Payne's No. 1 Crouse, C NE SW Sec. 29-25-8w.
T.D. 6,502 ft. contract depth; S.D.

Shell Pet. Corp.'s No. 1 Foster, NW SE Sec. 30-27-8w.
Drlg. 1,680 ft.

Wentz Oil Corp. et al's No. 1 Wirts (Community), SE SE NW Sec. 22-23-4w.
S.D. for wtr. at 3,422 ft.

Yingling et al's No. 1 Allen, SW SE Sec. 26-26-4w.
Rig on ground.

Greer County

H. N. Payne et al's No. 1 Tressell, NW cor. Sec. 1-7-22w.
T.D. 1,785 ft.; U.R. 8-in. csg.; to deepen. **Cleaning out.**

Harmon County

King & Hutchinson's No. 1 Hollis, 315 ft. from N and 315 ft. from W lines of SW Sec. 20-2-25w.
Location.

J. J. Mathis' No. 1 Keith, NE NW SW Sec. 12-5-26w.
Machine on ground.

Hughes County

Caprock Oil Co.'s No. 1 Parks, SW SW SE Sec. 34-7-8.
Rigging up (correction).

Freeman et al's No. 1 Kite, NW NW NE Sec. 8-6-10.
Top sand 700 ft.; show oil; S.D.

Earl Sadler's No. 1 Scott, NW cor. Sec. 22-7-9.
Drlg. 860 ft.

Texas Co.'s No. 1 Keaton, NW SW Sec. 4-8-10.
Set 8-in. csg. 3,950 ft.

Kay County

J. T. Lindsay's No. 1 Waggoner, NW NW NE Sec. 3-27-1.
T.D. 3,875 ft. in Miss. lime; straightening hole.

Lewis Prod. Co.'s No. 1 Hollenbeck, SE NE SE Sec. 15-27-2.
Drlg. 600 ft.

Marshall, Haddock et al's No. 1 Hermes, SW SW NW Sec. 6-26-4.
Drlg. 1,740 ft.

Robinson Drlg. Co.'s No. 1 Hermes, SW SW NW Sec. 6-26-4.
Drlg. 1,790 ft.

Kiowa County

Rajah Oil Co.'s No. 3 Stone, C SE NE Sec. 34-7-17w.
Sulphur wtr. 1,390-1,430 ft.; T.D. 1,476 ft.; S.D.

Leflore County

McCraw et al's No. 1 Tidwell, C NW SE Sec. 17-3-22.
T.D. 200 ft.; S.D.

Lincoln County

W. N. Anthony's No. 1 Fruin-Eckman, SE SE SW Sec. 4-16-1e.
Rigging up standard tools; T.D. 5,181 ft.

Chester L. Carlock's No. 1 Young, C N½ NW NW Sec. 23-15-5.
Spudded and S.D.

Chas. Ralph's No. 1 Young, C N½ NW NW Sec. 23-15-5.
Spudded and S.D.

Stanolind O. & G. Co. and Amerada Pet. Corp.'s No. 1 Connelly, SE NE SE Sec. 23-14-2.
Drlg. 4,430 ft.

Texas Co.'s No. 1 Niccum, SE SW NW Sec. 28-14-5.
T.D. 4,863 ft. in Wilcox; salt wtr.; P.B. to Prue.

Logan County

Anderson-Kerr et al's No. 1 Goodium, NE cor. Sec. 15-15-3w.
Drlg. 3,452 ft.

Olson Drlg. Co., Anderson-Prichard and Frank Buttram's No. 1 Cavalt, NW SW SE Sec. 22-16-3w.
Drlg. 2,845 ft.

Sinclair Prairie and Slick-Urschel's No. 1 Koatsch, SW cor. Sec. 23-15-3w.
Shut in for tanks.

Stanolind O. & G. Co., Amerada Pet. Corp. and Eason O. & R. Co.'s No. 1 Gragg, SW SW NE Sec. 20-18-4w.
Drlg. 5,250 ft.

Texas Co. et al's No. 1 Wood, SW SW NE Sec. 34-15-4w.
Drlg. 5,090 ft.

McIntosh County

Glen Cole et al's No. 1 Woodard, NE SW NE Sec. 2-12n-17e.
Rig on ground.

Major County

Indian Territory Illuminating Oil Co. and Continental Oil Co.'s No. 1 Fairview, 700 ft. from S and 670 ft. from W lines of SE¼ Sec. 32-22-14w.
Top sand 6,857 ft.; show gas at 6,882½ ft.; drlg. 7,210 ft.

Noble County

Atlantic Oil Prod. Co. et al's No. 1 Strom, 640 ft. S & W NE cor. SE¼ Sec. 8-20-1w.
Drlg. 4,424 ft.

Okfuskee County

Sunray Oil Co.'s No. 1 Culla, NE SW NE Sec. 13-12-8.
Drlg. 1,575 ft.

Oklahoma County

Gypsy Oil Co. and Indian Territory Illuminating Oil Co.'s No. 1 Salisbury, NW NE NE Sec. 13-14-4w.
T.D. 6,710 ft.; small show oil; bailing.

Sinclair Prairie O. & G. Co.'s No. 1 Corbett, NE NW NE Sec. 17-13-2w.
Wilcox sand 6,645-6,706 ft., T.D.; flowed 485 bbls. of oil, 27% wtr., 2% b.s.; cored T.D. 6,733½ ft.; salt wtr. in bottom.

Osage County

J. A. Freeberg et al's No. 1, NE cor. SE Sec. 1-25-6.
S.D. at 1,000 ft. for repairs.

Payne County

Amerada-Stanolind et al's No. 1 Friedman, SE cor. Sec. 28-19-3.
Simpson dolomite 4,289 ft.; sand 4,301-05 ft.; flowed 660 bbls. first day; 540 bbls. second day, 1% wtr.; shut in for pipe line completed.

Pawnee County

Stanolind O. & G. Co.'s No. 1 Shunatana, NE SW SE Sec. 32-22-3.
Oswego 2,485 ft.; fishing at 2,624 ft.; whipstock at 2,690 ft.; P.B. to 2,546 ft. and drlg. in third hole at 2,420 ft.

Pontotoc County

E. M. Blanchard's No. 1 Crabtree, NE SE NE Sec. 27-3-6.
S.D. 2,920 ft.

Philip Boyle's No. 1 McCracken, NE NW NW Sec. 21-5-4.
T.D. 2,172 ft.; plugged back to 2,167 ft.; pumped salt water with show of oil.

Charles E. Carter's No. 1 Wood, NW SW SE Sec. 5-4-2.
S.D. 2,495 ft.

Clark & Cowden's No. 1 Reynolds-Wagner, SE NW SE Sec. 17-2-7.
Location.

Continental Oil Co.'s No. 1 McCarty, C SE NW Sec. 12-1-7e.
Wapanucka 2,060 ft.; Cromwell 2,740 ft.; drlg. 2,836 ft.

Crabb-Craw Oil Co.'s No. 1-A Breco, SE NE SW Sec. 3-4-6.
Sand 1,106-18 ft.; pumped 10 bbls. in 24 hrs.; S.D.

W. A. Delaney et al's No. 1 Fulsome, SE NE Sec. 35-4-6.
Location.

Franks Bros.' No. 1 Abbott, SW NW NE Sec. 34-3-6.
Rig.

Gillette & Kroeger's No. 1 Duver, NW NW SE Sec. 36-1n-6e.
T.D. 1,325 ft.; S.D.

McBride Inc. et al's No. 1 Copeland, SE NW Sec. 31-4-5.
Rigging up cable tools.

Southern Oil Co.'s No. 1 Perry, SW SW NW Sec. 11-4-6.
Rig on ground.

Leonard Williams et al's No. 1 Breedon, NW cor. Sec. 6-2-5.
Spudded, rigging up standard tools.

Pottawatomie County

Hoss Oil Co. et al's No. 1 Sparkman, SE NE Sec. 33-8n-4e.
Location.

Paul Traugh et al No. 1 Lowry, near C NE SE NE Sec 30-6-5.
Broken sand 2,415-46 ft.; solid sand 2,-446-61 ft.; **T.D. 2,462 ft.; flowed 105** bbls. in 2 hrs.; pump 52 bbls. oil and 8 bbls. wtr. in 24 hrs.

Seminole County

Carter Oil Co. and Shell Petroleum Corp.'s No. 1 Brown, C W½ SE SW Sec. 23-8-5.
Wilcox sand 4,408-20 ft., T.D.; dry; P.B. to 4,185 ft.; acidized Hunton; swbd. dry; S.D.

L. Cooper's No. 1 Chandler, NE SE SW Sec. 4-5-6.
S.D. 1,780 ft.

Ray Dorris and J. T. Hall's No. 1 Dorris, SE SE SW Sec. 31-10-7.
Sand 520-60 ft.; H.F.W.; S.D. 608 ft.

Scott & Smith's No. 1 Abb, SE NW SE Sec. 4-6-6.
Drlg. 2,270 ft.

Van Deventer et al's No. 1-A Bender, NE NE SW Sec. 3-8-8.
Sand (corrected) 3,170-3,200 ft.; T.D.; Swbd. 95 bbls. oil 24 hrs.; to shoot.

Verser & Clay et al's No. 1 Thomas, NE SE NW Sec. 1-6-6.
S.D. at 3,003 ft.

Tom Phillips et al's No. 1 Abbott, NE cor. Sec. 33-8-7.

Texas County

Cabot Carbon Co.'s No. 1 Jackson, C NW Sec. 7-3n-15ª (Cimarron Meridian).
Sand 2,538-40 ft.; T.D.; est. 50,000,000 ft. gas.

Washita County

Okla-Midwestern Oil Co.'s No. 1 Dock, SW cor. Sec. 21-8-18w.
Drlg. 2,824 ft.

L. P. McWhirter's No. 1 fee, SW cor. Sec. 24-8n-19w.
T.D. 1,008 ft.; S.D. for repairs.

SOUTHERN OKLAHOMA

Atoka County

L. O. Garner et al's No. 1 Garner, C NE NW NE Sec. 27-1n-15 (300-ft. test).
34 ft.; S.D. for csg.

Keaton et al's No. 1-A Roland, NE cor. NW NE NE Sec. 16-2s-10e.
T.D. 850 ft. (corrected); lime at 800-47 ft.; will treat.

Malarnee et al's No. 2 D.O.K. land, C SE SE Sec. 35-2s-13.
T.D. (corrected) 3,136 ft.; cleaning out.

Mid-Continent Petr. Corp. et al's No. 1 Fulton, SW cor. Sec. 19-1s-12e.
drlg. 2,350 ft. in Wapanucka.

R. H. Pierce et al's No. 1 Aetna Life Ins. Co., NW SW NE Sec. 10-1n-12e.
Drlg. 1,305 ft.

Vierson et al's No. 1 Williams, NE SW NW Sec. 34-2s-10.
Drlg. 2,145 ft.

Bryan County

Welch Oil Corp.'s No. 1 Collins, NE NE Sec. 19-8s-8e.
S.D. 825 ft.

J. D. Parks' No. 1 Coats, SE NE SW Sec. 1-5s-8e.
T.D. 325 ft.; S.D.

H. B. Smith et al's No. 1 Henry, C NW NE Sec. 10-8s-7e.
Rig (4,500 ft. test).

Trio Oil Co.'s No. 1 Gilbert, SW NE SW Sec. 25-8s-7.
Set pipe 896 ft.

Carter County

Waco Turner's No. 1 Munson, NE NW NE Sec. 35-5s-2w.
S.D. for water, 4,765 ft.

Carter Oil Co.'s No. 1 Carter-Williams, SW NE SW Sec. 27-2s-3w (7,000-ft. test).
Drlg. 6,980 ft. in lime.

Choctaw County

Rhodes et al's No. 1 Possumik Savings Bank, SE cor. Sec. 1-5s-17.
Fishing tools at 605 ft.

Jackson County

Associated Oil Co.'s No. 1 Harrell, NE NE SE Sec. 13-1s-21w.
S.D. 875 ft.; cleaning out.

Dengail Oil & Gas Co.'s No. 1 Robinson, SE SE NE Sec. 32-1s-22w.
Granite wash 2,890-92 ft.; showing of oil; drlg. 3,660 ft. in shale.

Gypsy Oil Co.'s No. 1 Boucher, NW SW SW Sec. 32-1-19w.
S.D. at 2,340 ft. for rotary tools.

Gypsy Oil Co.'s No. 1 Stokes, SE NW SW Sec. 11-1-20w.
Lime 1,709-11 ft.; T.D. 1,722 ft.; S.D.

Marshall & Burnham's No. 1 Hess, NE SW NE Sec. 27-1s-20w.
T.D. (corrected) 1,160 ft.; cleaning out.

Palo Duro Oil Co.'s No. 1 Ealum, SW SW SW Sec. 16-2-21w.
S.D. 2,505 ft.

Triangle Oil Co.'s No. 1 Fox, E½ W½ NW Sec. 11-3n-20w.
S.D. 632 ft.

Jefferson County

Gypsy Oil Co.'s No. 1 James, SW SE SE Sec. 30-6s-6w.
S.D. 2,102 ft.

G. W. Howell et al's No. 1 Currey, SE SE SW Sec. 36-4s-9w.
Drlg. 1,680 ft.

Johnston County

W. A. Delaney et al's No. 1 Diamond, NW NE SE Sec. 5-1s-8.
Drlg. 2,100 ft.

Equitable O. & G. Co.'s No. 1 Bellsey, NE SW Sec. 12-2s-4e.
Location.

M. A. Neff and R. A. Godfrey's No. 1 Ford, NE SE NW Sec. 13-4s-5.
T.D. 100 ft.; dry and abnd.

Schermerhorn Oil Co.'s No. 1 Rich, SW SE SE Sec. 35-4s-4e.
Fishing at 1,041 ft.

Love County

Sinclair Prairie Oil Co.'s No. 1 Stockton, SE SE SW Sec. 26-6s-2w (5,000 ft. test).
S.D. for water, 3,032 ft.

Marshall County

Jess Cook et al's No. 1 May, NE NW Sec. 12-8s-5.
Drlg. 75 ft.

Neff & Godfrey's No. 2 Ruthford, 790 ft. N and 580 ft. W of C Sec. 13-4s-5e.
T.D. 100 ft.; dry and abnd.

Norman Smith's No. 1 Chestnut, NE cor. Sec. 33-8s-5e.
S.D. 275 ft. for 10-in. casing.

Paul Robb's No. 1 Vitteloe, C NE SE Sec. 11-5s-4e.
Top Sylvan shale 5,405 ft.; T.D. 5,461 ft.; S.D.

Murray County

Equitable O. & G. Co.'s No. 1 Ferguson, NE NE SW Sec. 36-1s-3.
Oil Creek sand 1,910-2,092 ft.; flowing fresh water.

Pushmataha County

C. W. Whitehead et al's No. 1 Misser, SE SW SW Sec. 35-3s-18e.
Drlg. 3,380 ft. (corrected).

Stephens County

Geo. Pace et al's No. 1-A Damron, SE SE SW Sec. 25-2s-6w.
Drlg. 500 ft.

Prince Bros.' No. 1-A Williams, C SW SE Sec. 19-2-8w.
R.U. and S.D.

Tillman County

J. B. Connelly's No. 1 McCord, NW SE NE Sec. 15-1-17w.
Granite Wash 315-17 ft.; H.F.W.; S.D. at 330 ft.

Loper et al's No. 1 Conrad, NE cor. Sec. 25-1s-19w.
Drlg. in brown shale 1,660 ft.

KANSAS WILDCATS

Week Ending August 17

(Descriptions are East unless marked otherwise)

Barber County

Southern Drlg. Co. et al's No. 1 Davis, 330 ft. from W and 330 ft. from S lines of NE Sec. 12-34-15w.
Viola 5,215 ft.; at 5,275 ft., 1,000,000-ft. gas show and spray of oil; acidized; 400 ft. fluid in hole; to plug back to Chat.

L. H. Wentz' No. 1 Skinner, SE NW NW NE Sec. 29-31-14w.
Drlg. 4,290 ft.

Barton County

Continental Oil Co.'s No. 1 Klug, C N half N half NE Sec. 18-17-12w.
Bldg. rig.

Lario O. & G. Co. et al's No. 1 Peter, NW cor. Sec. 24-20-11w.
Drlg. 565 ft.

Palmer Oil Corp.'s No. 1 Morris, SE NW NE Sec. 6-19-15w.
K. C. lime 3,315 ft.; U.R. 3,335 ft.

C. L. Price et al's No. 1 Ehrlich, NW NW SE Sec. 10-16-13w.
Cleaning out 3,075 ft.

Suppes & Witt's No. 1 Hayes, NW cor. Sec. 7-16-15w.
Cleaning out 2,820 ft.

Terry & Feaster et al's No. 1 Kimpler, SE NE NE Sec. 31-18-11w.
Old T.D. 250 ft.; drlg. 405 ft.

Terry & Feaster's No. 1 Feist, NE NE SE Sec. 29-18-11w.
S.D. 2,215 ft.

W. E. Witt's No. 1 Murray, NW SW Sec. 14-17-14w.
Cellar.

Butler County

Folhamus et al's No. 2 Semisch, C S½ NE NE Sec. 5-28-7.
Sand 2,721-58 ft.; pumped 20 bbls. oil, 1 bbls. wtr. in 12 hrs.; shot with 20 qts.
Cleaning out.

Western Kansas O. & R. Co.'s No. 1 King & Marshall, NW NW SW Sec. 11-28-6.
Drlg. 2,739 ft. in Mississippi lime.

Clark County

Watchorn Pet. Co.'s No. 1 Stevens, NW NE NW Sec. 21-32-21w (old T.D. 4,190 ft.).
Cleaning out to deepen.

Cowley County

Baden, Johnson, Roth & Faurot's No. 1 David, NE SW Sec. 35-30-4.
Sand 2,953-75 ft.; Swabbed and flowed 55 bbls. oil in 12 hrs.

Lloyd, Frost & Study's No. 1 Weathered, SW SE SE Sec. 28-31-3.
Siliceous lime 3,389 ft.; pumped 92 bbls. of oil and 47 bbls. of wtr. in 17 hrs.; H.F.W. 3,405 ft.; P.B. 3,349 ft.; pumped 550 bbls. oil and 70 bbls. wtr.; now standing acidized.

Murfin & Stewart's No. 1 Newton, SE SE SE Sec. 21-30-2.
Rig.

Wakefield et al's No. 1 Auman, SE SE NE Sec. 32-33-3.
Drlg. 1,820 ft.

Dickinson County

Dutch Oil Co.'s No. 1 Phillips, C NE NW Sec. 15-15-1e.
Hunton 2,808 ft.; H.F.W. 2,812 ft.; S.D. 3,036 ft.

Ellis County

Ellis County Oil Co.'s No. 1 Freis, near C SE SE NW Sec. 10-12-20w.
Moving in material.

Helmerich & Payne et al's No. 1 Kuhn, C NE quarter Sec. 16-14-20w.
Drlg. 3,785 ft.

Tom Palmer and Storm King Oil Co.'s No. 1 Ruder, SE SE NW Sec. 17-15-18w.
Pumped 206 bbls. 11 hrs. acidized; potential 499 bbls. 24 hrs.; pay 3,422-25 ft. completed.

L. Roark et al's No. 1 Bemis, SE cor. Sec. 16-11-17w.
U.R. 12-in. csg. to 770 ft.

Ellsworth County

Franco Central et al's No. 1 Frevert, SW cor. Sec. 8-17-10w.
Drlg. 2,420 ft.

Keith et al's No. 1 Schepman, SW SW NW Sec. 22-17-10w.
Bldg. rig.

Lario O. & G. Co.'s No. 1 State, SW SW SW Sec. 29-15s-8w.
T.D. 3,937 ft.; P.B. 3,525 ft.; fishing.

Graham County

Cusco Oil Co.'s No. 1 Kaufman, C NE NE Sec. 18-6-24w.
Rotary rig.

Helmerich & Payne et al's No. 1 Stites, C SW SW Sec. 8-10-22w.
Drlg. 3,955 ft.

Vickers Pet. Co. & Phillips Pet. Co.'s No. 1 Hutton, 430 ft. W and 330 ft. S of NE SE Sec. 29-8-22w.
Rigging up.

Harper County

Kessler, Thier et al's No. 1 Wolfje, SW SW NE Sec. 17-33-6w.
Drlg. 4,903 ft. in Wilcox; salt wtr. 4,858-61 ft.; show gas 4,874 ft.

Harvey County

Goering Bros.' No. 1 Brainard, NE SW Sec. 3-22-2w.
K. C. lime 2,387 ft.; running 8-in. at 2,648 ft.

Hartman & Blair et al's No. 1 Redinger, NW cor. Sec. 15-24-3w.
Fishing 3,045 ft.

Kingman County

Derby et al's No. 1 Bartholomew, SW NW NW Sec. 8-27-4w.
Viola 4,016 ft.; T.D. 4,027 ft.; 1,050 ft. wtr. and 200 ft. oil in hole.

McPherson County

Carey & Miller's No. 1 Husband, SE SE NW Sec. 6-19-3w.
Drlg. 2,125 ft.

Hollow, Toews & Hinkle's No. 1 Aschman, NW NW SE Sec. 8-21-4w.
K. C. lime 2,700 ft.; drlg. 3,020 ft.

Osage County

Jim Edwards' No. 1 Detrick, C NW SE Sec. 21-14-15.
Show oil and gas 782-800 ft.; T.D. 800 ft.; shut down 5-8-35.

Reno County

Allison & Fitzwilliams' No. 1 Dukelow, NE NE NE Sec. 11-22-6w.
K. C. lime 2,980 ft.; drlg. 3,135 ft.

Haynes Bros.' No. 1 Mueller, SE SE NW Sec. 30-24-4w.
Hunton 3,690-3,701 ft.; hole full fluid, mostly water; pulled 5-in. csg.

Shell Pet. Corp.'s No. 1 Reese, center W½ W½ SW¼ Sec. 11-26-9w.
Drlg. 2,667 ft.

Stanolind & Amerada's No. 1 J. J. Hilger A, NE NE SW Sec. 21-26-4w.
Drlg. 2,945 ft.

Rice County

Aylward et al's No. 1 Haas, NE NW NE Sec. 4-19-10w.
Moving in material.

Aylward et al's No. 1 Rickard, SW SW NW Sec. 22-18-9w.
Drlg. 1,600 ft.

Anderson & Kerr's No. 1 Wernet, NW cor. Sec. 24-20-6w..
12-in. csg. 110 ft.; W.O.C.S.

Detrick et al's No. 1 Conner, C NE NE Sec. 28-19-7w.
Spudded and S.D.

Detrick et al's No. 1 Monroe, C NE NE Sec. 9-20-7w.
Spudded & S.D.

L. E. Douglas and Hutchinson O. & G. Co.'s No. 1 Hammell, NE NE NE Sec. 16-19-10w.
Anhy. 466 ft.; fishing at 652 ft.

J. M. Hurd's No. 1 Wright, NE cor. Sec. 36-21-7w.
Location.

Three Rivers Oil Co.'s No. 1 Buehler, NW NW NW Sec. 17-18-8w.
K.C. lime 2,895 ft.; show of gas 2,910 ft.; showing oil 2,913 ft.; H.F.W. 2,987 ft.; cleaning out 3,007 ft.

Rooks County

El Dorado Refining Co.'s No. 1 Marshall, C SE SE Sec. 8-7-17w.
Drlg. 410 ft.

F. A. Gillespie & Sons' No. 1 Low, NE NE NW Sec. 13-6-18w.
Rig.

Murfin et al's No. 1 Wasthusin, NE NE SE Sec. 19-9-16w.
Drlg. 555 ft.

Lario O. & G. Co. et al's No. 1 Fisher, NE cor. Sec. 22-10-18w.
Underreaming 750 ft.

Smith & Ash's No. 1 Nelson, NW NW NE Sec. 27-10-16w.
Drlg. 3,475 ft.

Trees Oil Co. and Findeiss' No. 1 Johnson, SW SW SE Sec. 26-10-19w.
Run 8-in. csg. at 2,926 ft.

Rush County

Boyle & Grosman et al's No. 1 Yost, C SW SW Sec. 28-17-18w.
Granite Wash 3,700 ft.; H.F.W. 3,719-22 ft.; T.D. 3,759 ft.; dry and abnd.

E. L. Byers et al's No. 1 Ewing, C W half W half SW Sec.
Bldg. rig.

Darby Pet. Co.'s No. 1 Jacobs, SW SW NW Sec. 3-16-19w.
Location.

Gypsy Oil Co.'s No. 1 Kraisinger, SE NE SE Sec 23-18-17w.
S.D. 2,512 ft.

Ramsey Pet. Co. et al's No. 1 Darkes, SW SW NW Sec. 5-17-20w.
K.C. lime 3,568 ft.; 600 ft. water in 3 hrs.; H.F.W. 3,685 ft.; cleaning out.

Twin Drlg. Co. et al's No. 1 Appl, SW SW NE Sec. 29-17-17w
H.F.W. 2,565 ft.; U.R. at 2,580 ft.

Russell County

J. Brouk and R. D. Bailey's No. 1 Kleusner, NW NW SE Sec. 34-15-12w.
K. C. lime 2,990 ft.; U.R. 3,080 ft.

Buffalo Oil Co.'s No. 1 Kuns, NE NE SW Sec. 19-14-15w.
Cellar and material.

Coralena Oil Co.'s No. 1 Berrick, NE NW NE Sec. 6-15-13w.
Moving in material.

Coralsana Oil Co.'s No. 1 Fiegler, SE SE NE Sec. 11-15-14w.
Underreaming 2,595 ft.

Finney et al's No. 1 Chenowath, SW SW SW Sec. 10-15-13w.
Cellar.

Hartman & Blair's No. 1 Claussen, SE NE SW Sec. 34-12-14w.
Drlg. 2,020 ft.

Hartman & Blair's No. 1 Mills, SE SE SW Sec. 27-12-15w.
Drlg. 1,085 ft.

Murfin et al's No. 1 Gorham estate, NE NE SE Sec. 29-14-15w.
Cellar.

Nassau Oil Corp.'s No. 1 Karst, NW SW NE Sec. 27-15-14w.
Cleaning out 2,205 ft.

Pryor and Lockhart's No. 1 Spicer, NE NE SE Sec. 21-11-15w
Oswald 2,997 ft.; S.O. and H.F.W. 3,000 ft.; drlg. 3,021 ft.

P. G. Reynold's No. 1 Frederickson, 330 ft. from S and 1,060 ft. from W lines SE¼ Sec. 6-13-12w.
Cellar.

Roth & Faurot's No. 1 Shaffer, C NW NE Sec. 31-13-12w.
Underreaming 2,412 ft.

Stearns & Streeter's No. 1 Dreiling, SW SW SW Sec. 8-13-15w.
Drlg. 2,185 ft.

Vernon & Murphin's No. 1 Becker, NE cor. Sec. 32-15-14w.
Oswald 3,144 ft.; T.D. 3,429 ft.; dry and abnd.

A. E. Seely et al's No. 1 Herman, SE NW Sec. 27-12-15w.
Siliceous 3,360-64 ft., T.D.; H.F.W.; dry and abdn.

Sedgwick County

Allison & Fitzwilliams et al's No. 1 Struthers, NE SW Sec. 34-28-2w.
Cleaning out at 3,703 ft.

Dickey Oil Co. et al's No. 1 Chase, SE cor. Section 11-27-2.
Underreaming 10-in. csg. at 2,300 ft.

Stafford County

Atlantic Oil Prod. Co. and Phillips Pet. Co.'s No. 1 Cornwall, C NE SW Sec. 4-25-13w.
Set 12-in. csg. at 240 ft. and W.O.C.S.

Empire O. & R. Co.'s No. 1 Grove, NE NE NW Sec. 5-22-11w.
Simpson 3,455 ft.; H.F.W. at 3,486 ft.; cementing 6-in. at 3,494 ft.

Rose-Spring Drlg. Co.'s No. 1 Toland, NW NW SW Sec 2-25-14w.
S.D. at 158 ft.

Sumner County

Allison & Fitzwilliams et al's No. 1-B Hitchcock, SW SW NE Sec. 16-30-1w;
Drlg. 2,570 ft. in Chat.

D. J. Wilson et al's No. 1 Clark, 1,320 ft. from W and 25 ft. from S line of NW Sec. 15-35-1w.
Drlg. 1,450 ft.

Winkler & Koch et al's No. 1 Belsley, SW SW NW Sec. 2-32-2w.
Drlg. 2,900 ft.

Trego County

Central Commercial's No. 1 Wagg, NW NW SE Sec. 17-13-21w.
Fishing at 1,600 ft.

Hansa & Lauck and Olson Drlg. Co.'s No. 1 Lang, SE SE NW Sec. 1-14-21w.
Fishing 3,645 ft.

Vickers et al's No. 1 Secor, NW NW NW Sec. 25-15-24w.
K. C. lime 3,635 ft.; running 7-in. 3,650 ft.

Woodson County

Connell & Marshall's No. 1 Klick, SW NW SW Sec. 20-25-14.
Sand 1,390-1,403 ft.; T.D.1,437 ft.; shot with 120 qts.; flow 548 bbls. oil; comp.

Saco Oil Co.'s No. 1-A Hassenpflug, SW NW NE Sec. 34-25-14.
Drlg. 400 ft.

Chas. Sheedy's No. 1 Snattinger, C E½ NE NE Sec. 3-26-14.
S.D. at 200 ft.

GULF COAST WILDCATS

Week Ending August 17

Raccoon Bend—Austin County

Humble O. & R. Co.'s No. 5-X Reese, 150 ft. SW of Wm. Smeathers League line, 223 ft. NW of SE property line, 223 ft. SE of NW property line, Wm. C. White Sur.
10¾-in. csg. 1,028 ft.; T.D. 1,055 ft.

Humble O. & R. Co.'s No. 3 H. F. Granen. 682 ft. NE of No. 1, 150 ft. SE of NW¼ of 63.8-ac. tract, Smeathers Sur.
Location.

Humble O. & R. Co.'s No. 7-X McCasland, 190 ft. NW line, 168 ft. SE line of Smeathers & White Sur.
Location.

Humble O. & R. Co.s No. 9-X Bellville, 1,663 ft. along most northerly SW line, 750 ft. of most northerly SW line from 8-X, in Wm. C. White Sur.
T.D. 4,330 ft.; P.B. 3,172 ft.; 7-in. csg. 3,145 ft.; I.P. 800,000 ft. of gas per day on ¾-in. choke; T.P. 860 lbs.; C.P. 94 lbs.

Danbury—Brazoria County

Turnbull & Irwin's No. 1 Blakely, Sec. 14, H.T.&B. Sur.
Drlg. shale 6,368 ft.

Hastings—Brazoria County

Humble O. & R. Co.'s No. 1 G. C. Cannon, 330 ft. N, 330 ft. W from SE cor. of 60-ac. lease, H.T.&B. Sur., Sec. 36.
Bldg. foundation.

Humble O. & R. Co.'s No. 1 J. F. Bridges, center of N 10 acres of 20-ac. lease, A. C.H.&B. Sur. No. 2.
Location.

Humble O. & R. Co.'s No. 2 J. F. Bridges, center of S 10 acres of 20-ac. lease, A. C.H.&B. Sur. No. 2.
Location.

Humble O. & R. Co.'s No. 1 J. C. Johnson, center of 10-ac. lease, A.C.H.&B. Sur. No. 2.
Drlg. shale and lime 4,835 ft.

Stanolind O. & G. Co.'s No. 2 Wooster, 119 ft. from N line, 356 ft. from most easterly W line of 70.8-ac. tract.
10¾-in. csg. 2,117 ft.; prepare to drill plug.

Stanolind O. & G. Co.'s No. 2 W. H. Avitts, 330 ft. from E line, 119 ft. from S line, 765 ft. S of No. 1 A.C.H.&B. Sur. No. 1.
Drlg. lime 4,310 ft.

Stanolind O. & G. Co.'s No. 3 Grate, 608 ft. N, 764 ft. W of SE cor. of 71.6-ac. tract, A.C.H.&B. Sur. No. 2.
Rig up.

Stanolind O. & G. Co.'s No. 3 W. B. Wooster, 330 ft. NW of road, 330 ft. from S line of A.C.H.&B. Sur. No. 1.
Drlg. shale 3,400 ft.

Stanolind Oil & Gas Co.'s No. 1-A, W. H. Avitts, 330 ft. S, 330 ft. W of NE cor. of 45.85-ac. "A" lease, A.C.H.&B. Sur. No. 1.
Drlg. sand 5,040 ft.

Stanolind Oil & Gas Co.'s No. 2 Williams, 330 ft. S, 330 ft. E of the most NW cor. of the Williams 81.13-ac. tract A.C.H. &B. Sur. No. 1.
T.D. 6,100 ft.; running 7-in. csg.

Stanolind Oil & Gas Co.'s No. 1 Frank Guido, 330 ft. N, 990 ft. W of SE cor. of Guido 40-ac. tract, H.T.&B. Sur. No. 36.
Drlg. shale 5,822 ft.

Stanolind Oil & Gas Co.'s No. 1 Fannie Drake, 330 ft. N, 990 ft. W of SW corner of 130-ac. tract, H.T.&B. Sur. No. 36.
Drlg. shale 5,992 ft.

Stanolind Oil & Gas Co.'s No. 1 Pennock Estate, 330 ft. N, 990 ft. W of SE cor. of 40-ac. tract, H.T.&B. Sur. No. 36.
Coring sand 5,910 ft.

Stanolind Oil & Gas Co.'s No. 1 Laur D. Shaw, 330 ft. S, 330 ft. W of most easterly NE cor. of 120-ac. tract, H.T.&B. Sur. No. 36.
T.D. 6,100 ft.; running 7-in. csg.

Stanolind O. & G. Co.'s No. 4 Sneed, 330 ft. S, 330 ft. W of NE cor. of Lot 13, D. M. Jay Subd., on Sneed 225-ac. tract, A.C. H.&B. Sur. No. 2.
Drlg. shale 7,720 ft.

Stanolind O. & G. Co.'s No. 2 E. Grote, 466 ft. at R/A from N line and 1,961.6 ft. at R/A from E line of Grote 71.62-ac. tract, A.C.H.&B. Sur. No. 2.
Made 107 bbls. of oil per day; tubing sanded up; cleaning out; T.D. 6,100 ft.

Manvel—Brazoria County

Bowles and Barsodi's No. 5 B. E. Norvell Investment Co., 274.5 ft. from S line, 440 ft. from E line of Lot 45, Sec. 33, H.T. &B. Sur.
Location.

Jay Simmons' No. 1 Wilson, center of Lot 25, H.T.&B. Sur. No. 23.
Location.

J. Simmons et al's No. 1 Martens, 31 ft. WE line center of North and South lines, Lot 10.
S.D. 1,120 ft.

J. W. Sorrells' No. 1 Swift, Blk. 21, Abst. 318, H. N. Little Sur.
Derrick.

Texas Co.'s No. 5-H H. J. Wray, 1,650 ft. S. 42 degrees W, and 330 ft. S, 48 degrees 23 ft. E from NE cor. of Lot 20, T. Spraggins Sur.
10-in. csg. 1,247 ft.; T.D. 1,357 ft.

Texas Co.'s No. 6 Houston Oil Field Assn., 247.5 ft. S, 400 ft. W of NE cor. of Lot 25, A.C.H.&B. Sur., Sec. 91.
T.D. 4,010 ft.; 7-in. csg. 3,995 ft.

Texas Co.'s No. 12-A Belcher, 770 ft. S, 41 deg. 40 ft. W and 648 ft. S, 47 deg. 59 ft. E from N cor. of lease, H. N. Little Sur.
Sidetracked at 3,685 ft.; 7-in. csg. 3,779 ft.; I.P. 187 bbls. per day.

Texas Co.'s No. 1 O. W. Halligan, center of Lot 27, H.T.&B. Sur. No. 23.
T.D. 4,014 ft.; 7-in. csg. 3,997 ft.; I.P. 9 bbls. per hour on ¼-in. choke; T.P. 310 lbs.

Texas Co.'s No. 2 O. W. Halligan, center of Lot 26, H.T.&B. Sur. No. 23.
T.D. 4,060 ft., sidetracked and drilled to 4,030 ft.; P.B. to 3,000 ft.; sidetracked hole 3,041 ft.

Texas Co.'s No. 16 Houston Oil Fields Assn., 247 ft. S, 440 ft. E from NW cor. of Lot 19, A.C.H.&B. Sur. No. 91.
T.D. 5,785 ft.; P.B. and sidetracked at 5,401 ft.

Texas Co.'s No. 2 Dawson, 247 ft. S, 241 ft. W of NE cor. of Lot 58, H.T.&B. Sur. No. 23.
Location.

Thompson Drlg. Co.'s No. 2 Exaccastedes, H.T.&B. Sur. No. 23, center N and S lines, 220 ft. E of W line, Lot 39.
Drlg. shale 3,930 ft.

Trumba Oil Co.'s (J. M. Campbell) No. 1 H. McCauley, 150 ft. each way out of NE cor. of W 5 acres of Lot No. 1, A.C.H.&B. Sur. No. 91.
Location.

Turman Oil Co.'s No. 2 Hart, 40 ft. N, 50 ft. W of No. 1.
T.D. 4,020 ft.; may abandon.

Turman Oil Co.'s No. 3 Hart, 150 ft. E of W line, 433 ft. S of N line of Lot 8.
Location.

Uscan Oil Co.'s No. 1 France, H.T.&B. Sur. No. 23, 150 ft. W of E line, 490 ft. S of N line, Lot 9.
T.D. 4,057 ft.; cored oil sand from 3,972-96 ft.; tested gas, oil or water on drill stem test.

Uscan Oil Co.'s No. 1 Ebbert, 347.5 ft. from N line, 247.5 ft. from S line of 10-ac. tract, Sec. 23, H.T.&B. Sur.
Rig up to pump.

Old Ocean—Brazoria County

Harrison & Abercrombie's No. 2 Bernard River, 1,000 ft. N, 54 deg. W, 400 ft. S, 36 deg. W of No. 1, Charles Breen Sur.
T.D. 3,661 ft.; top sand 3,646 ft.; sidetracked hole while reaming; drlg. shale 6,310 ft.

Port Lavaca—Calhoun County

Halliburton Oil Co.'s No. 4 Bruton, M. Sanches Sur.
Rig up.

Steinberger Pet. Co.'s No. 2 Shofner, 466 ft. out of SW cor. of 100-ac. lease.
Drlg. shale 5,610 ft.

Tulane Gordon's No. 1 W. A. Shofner, 339.5 ft. from N line, 295 ft. from E line of block, D. Tilley Addn., M. Sanches Sur.
Location.

Anahuac—Chambers County

Gulf Prod. Co.'s No. 1 Knowles, 2,154 ft. SN line, 467 ft. EW line, Sec. 48, H.&T.C. Sur.
Rig up.

Humble O. & R. Co.'s No. 3 Clark, 1,468 ft. E of most easterly W line, 2,804 ft. W of No. 1, 466 ft. N of S line, H.T.&C. Sur.
Drlg. shale and lime 4,161 ft.

Humble Oil Co.'s No. 1-B Meddleton, 466 ft. out of SE cor. of Sec. 56, H.&T.C. Sur.
10¾-in. csg. 1,519 ft.; drlg. sandy shale 3,255 ft.

Humble Oil & Refg. Co.'s No. 5 Meddleton, 464 ft. W of E line, 1,339 ft. S of

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Latch Regulator

It Stops the Flow of Gas if Pressure falls too low

ON a low-pressure burner or furnace, the Fulton Cut-Out Latch Regulator stops the flow of gas if pressure falls below the desired minimum. When that happens, the cut-out latch will operate automatically to bring the valve to its seat and lock it there. Flow will not resume until the operator goes to the valve and opens it by hand. This eliminates completely the hazard for which the regulator is designed. Write for C-F Bulletin 2987.

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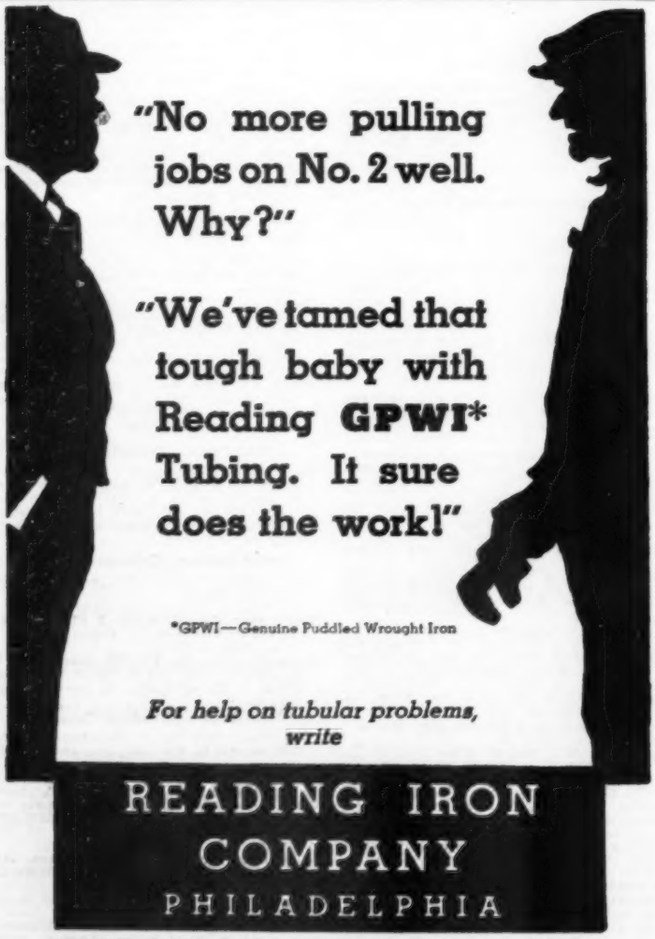
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N line of Sec. 53, H.&T.C. Sur. Location.
Humble O. & R. Co. and Rycade Oil Co.'s No. 1 Engels, 466 ft. out of SE cor. of Sec. 59, H.&T.C. Sur.
Drlg. shale and lime 6,051 ft.
Humble O. & R. Co.'s No. 2 Broussard, 2,332 ft. E of W line, 2,332 ft. N of S line of Sec. 63, H.&T.C. Sur. Location.
Johnson & Anderson's No. 1 J. T. White, 466 ft. from S and E lines of N 400 acres of James McGahey Sur.
Moving in material.
Mason & McCarthy's No. 2 White, 933 ft. W of No. 1, 466 ft. N of S line of James McGahey Sur.
13⅜-in. csg. 614 ft.; T.D. 756 ft.
Sun Oil Co.'s No. 1 White, 466 ft. out of NE cor., 466 ft. W of E line, 2,333 ft. S of N line of James McGahey Sur.
Drlg. shale and lime 3,8?? ft.
Woodley Pet. Co.'s No. 1 Blanke, 330 ft. NS line, 990 ft. EW line, Sec. 41, H.& T.C. Sur.
Derrick.

Barbers Hill—Chambers County

Sun Oil Co.'s No. 7 Higgins, 50 ft. S of N line, 50 ft. W of E line.
Drlg. shale 4,705 ft.
Sun Oil Co.'s No. 11 Chambers County, half way between and in line with Nos. 9 and 10.
Top oil sand 5,439 ft.; T.D. 5,634 ft.
Texas Gulf Prod. Co.'s No. 25-B Kirby, 75 ft. S of N line of Kirby "B" Lease, S offset to No. 3 Fitzgerald.
T.D. 5,121 ft.; prepare to test.
Yount Lee Oil Co.'s No. 30 Chambers County School Land, 50 ft. N of S line, direct offset to Sun Oil Co.'s No. 11.
T.D. 4,508 ft.; 7⅝-in. csg. 4,414 ft.

Big Creek—Fort Bend

Trans State Oil Co.'s No. 1 B. J. Wheat, 108 ft. N of S cor. of J. F. Ahlers lease and 88 ft. E at right angles, W. Young Sur.
T.D. 3,644 ft.; setting protection csg.

Boling—Fort Bend County

S. A. Brewster's No. 2 H. R. Farmer, James Scott Sur.
Drlg. sand rock 3,709 ft.
Sun Oil Co.'s No. 1 H. R. Farmer, 70 ft. SW line, 187 ft. NW line of 100-ac. tract, J. Scott Sur.
Drlg. sand and shale 1,605 ft.
Texas Co.'s No. 13 Anne Taylor, 150 ft. N at R/A of 10-ac. tract, S. F. Austin League.
Rig up.

Orchard—Fort Bend County

Gulf Prod. Co.'s No. 44 Moore, 500 ft. NW of No. 42, Leo Burknapp Sur.
Drlg. shale 2,410 ft.
Gulf Prod. Co.'s No. 43 Moore, 350 ft. E along S line of SW cor. of E.M.&G. Co. Sur. and 740 ft. N at R/A to said line of lease, 350 ft. E of No. 3 Moore.
6,652 ft.; 7-in. csg. 6,584 ft.

Thompson—Fort Bend County

Humble O. & R. Co.'s No. 4-B Grubbels, 786 ft. N of No. 3, 650 ft. SN line, 466 ft. WE line, S. Kennedy Sur.
10¾-in. csg. 802 ft.; drlg. lime 2,187 ft.

High Island—Galveston County

Stanolind Oil & Gas Co.'s No. 1-A Viterbo, 5,255 ft. of N line, 81 ft. W of E line of Lot 4, M. Dunman Sur.
Drlg. shale and lime 1,839 ft.
Yount Lee Oil Co.'s No. 1-B Gordon & Viterbo, 62.5 ft. from E line, 50 ft. from S line of Blk 1, M Dunman Sur.
T.D. 4,659 ft.; testing.
Yount-Lee Oil Co.'s No. 43 Cade, 900 ft. SE and 150 ft. NE of SW corner Block 4, Fitzsimmons Survey.
Drlg. shale 910 ft.
Yount Lee Oil Co.'s No. 3 Mace-Stewart, 202 ft. S of No. 2 Stewart and 133 ft. W of E line of 7.73 acre tract, D. Dunman Survey.
Drlg. shale and lime 2,000 ft.
Yount Lee Oil Co.'s No. 1-C Geo. Smith, D. Dunman Sur.
T.D. 5,126 ft.; I.P. 292 bbls. through ¼-in. choke.
Yount Lee Oil Co.'s No. 47 Cade, Fitzsimmons Sur.
Drlg. shale and lime 6,499 ft.
Yount Lee Oil Co.'s No. 46 Cade, 424 ft. SW of No. 35, 424 ft. NW of No. 36, Fitzsimmons Sur.
P.B. and sidetracked; drlg. shale and lime 5,520 ft.

Dickson—Galveston County

Humble O. & R. Co.'s No. 10 J. F. Magale, 500 ft. SW at right angles to projected center line of road along N line of Block 99, San Leon Farm Home tract, 345 ft. at right angles to E line of Lot No. 1, San Leon Farm Home tracts, 213 ft. from E line of J. C. Magale 346.46-ac. tract, A. Edwards Sur.
10¾-in. csg. 1,981 ft.; drlg. shale 2,006 ft.
Humble Oil & Refg. Co.'s No. 6 Mace Stewart, 6,087 ft. S of NE corner, 1,390 ft. W of E line and 1,390 ft. E of W line and 466 ft. N of S line of Stewart 883 acre lease, J. Sellers Survey.
T.D. 8,094 ft.; attempted drill stem test from 8,049-69 ft.; seat did not hold.
Humble O. & R. Co.'s No. 5-A Stewart, 466 ft. W of E line of Stewart "A" Lease, 5,500 ft. due S of No. 2-A Stewart, John Sellers Sur.
Rig up.
Humble O. & R. Co.'s No. 1 Bayou Development Co., 375 ft. S of N line and midway between E and W lines of Lot No. 7, John Sellers Sur.
Drlg. shale 7,692 ft.
Humble O. & R. Co.'s No. 1 E. E. Anderson, 375 ft. N of S line, and midway between E and W lines of Lot No. 4, John Sellers Sur.
20-in. csg. 226 ft.
Pure Oil Co.'s No. 2 J. W. Shelar, 779 ft. N, 132 ft. W of N. I. Shelar, B.B.B. &C. Sur.
Drlg. shale 7,412 ft.
Stanolind O. & G. Co.'s No. 2 State, 1,349 ft. E of No. 1 State.
Rig up.
Stanolind O. & G. Co.'s No. 1 State, 347 varas S of Humble O. & R. Co.'s No. 1 Jones.
T.D. 8,115 ft.; 7-in. csg. 8,113 ft.

Arriola—Hardin County

Houston Oil Co.'s No. 7-X fee, 660 ft. at 30 deg. 30 ft. SE from No. 1-X.
Drlg. wtr. sand 3,677 ft..
Houston Oil Co.'s No. 8 fee, Arriola Sur.
Drlg. shale 3,530 ft.

Batson—Hardin County

John Deering and Batson Oil Co.'s No. 4 Mary Hooks, located halfway between No. 1 and No. 3, W. Donoho Sur.
Bldg. derrick.
John Deering's No. 1 Conzelman, 2,810 ft. E along N line from NW cor. of H. Numm Sur. and 35 ft. at R/A, W. Donaho Sur.
T.D. 6,214 ft.; milling out of 7-in. csg. 5,946 ft.
John Deering's No. 1 Bullock, 1,000 ft. N, 17 ft. E of middle line of 30-ac. tract, Bullock tract, Dondo Sur.
T.D. 6,394 ft.; hole heaved to 4,944 ft.; S.D.
John Deering's No. 2 Cruse, 200 ft. E and 50 ft. S of No. 1 Cruse, W. Donahe Sur.
Coring sandy shale 4,952 ft.
Shell Pet. Corp.'s No. 1 R. O. Jordan Fee, W. Donoho Survey.
T.D. 4,895 ft.; 7-in. csg. 4,885 ft.

Pierce Junction—Harris County

Gulf Prod. Co.'s No. 11 H. C. Cain, 390 ft. from W line, thence 439 ft. at R/A to N line of 130-ac. tract, Jas. Hamilton Sur. No. 98.
Drlg. shale 6,530 ft.
Gulf Prod. Co.'s No. 40 E. R. Taylor, 89.5 ft. along E line of E. R. Taylor's 560-ac. tract from SW cor., south offset to Hamil & Smith's No. 1 Howe.
T.D. 6,543 ft.; sand 6,533 ft.; tested oil and salt wtr.
W. H. Holland et al's No. 1, I.&G.N.R.R., 830 ft. from S line of Jas. Hamilton Sur.
T.D. 3,983 ft.; 7-in. csg. 3,970 ft.; tested salt wtr.
Rio Bravo Oil Co.'s No. 28 Settegast, 1,010 ft. W and 450 ft. N from most southerly SE corner of "B" Lease, J. Kopmen Sur.
Top sand 3,614 ft.; coring oil sand 3,626 ft.

Humble—Harris County

Sun Oil Co.'s No. 86 River, 175 ft. from W line, 125 ft. E of No. 85, Robert Dunman Sur.
Drlg. rock 409 ft.
Sun Oil Co.'s No. 85 River.
Comp.; no gauge.
Sun Oil Co.'s No. 30 Bender, 2,393 ft. N, 3,050 ft. W of most northerly SE cor. of lease; B. Adams Sur.
Drlg. shale 4,022 ft.
Texas Co.'s No. 49 Stevenson, 500 ft. E, 150 ft. S of NW cor. Lot 6-B, J. B. Stevenson Sur.
T.D. 3,158 ft.; P.B. 3,115 ft.

Mykawa—Harris County

Alpha Pet. Co.'s No. 1 Waggenhausen, C of E½ Lot 10, F. J. Rothas Sur.
T.D. 4,681 ft.; P.B. 4,554 ft.; shot pipe and pulled 1,600 ft.; sidetracked at 1,476 ft.; drlg. shale 1,850 ft.
Danciger O. & R. Co.'s No. 2 Minnetex, 563 ft. due E of No. 1, thence 150 ft. at R/A, Blk. 254, W. H. Lovett Sur.
T.D. 4,344 ft.; top sand 4,818 ft.; I.P. 150 bbls. per day through ¼-in. choke; T.P. 250 lbs.; C.P. 500 lbs.
Flannigan Drlg. Co.'s No. 1 Minnetex, 150 ft. out of NE cor. of Blk. 261, Wm. Lovett Sur.
Spudded.
Sterling Oil & Refg. Co.'s No. 2 Williams, 250 ft. from N and E line of Wm. Lovett Sur.
T.D. 4,659 ft.; running 7-in. csg.; rig up to pump.
West Prod. Co.'s No. 2 Irwin, W. E. Walker Sur.
T.D. 4,240 ft.; well blew out and stuck drill stem at 2,000 ft.
West Prod. Co.'s No. 2 Oden, Blk. 14, F. J. Rothas Sur.
T.D. 4,500 ft.; 7-in. csg. 4,386 ft.; I.P. 336 bbls. per day through ¼-in. choke; T.P. 300 lbs.; C.P. 200 lbs.
West Prod. Co.'s No. 1 W. Lang, John R. Hall Sur., Blk. 7.
T.D. 6,954 ft.; heaving shale; washing to bottom.

Tomball—Harris County

Humble O. & R. Co.'s No. 3 Hampel, 475 ft. from SN line, 421 ft. EW line of 109.39-ac. tract, J. M. Hooper Sur.
10¾-in. csg. 948 ft.; T.D. 958 ft.
Humble O. & R. Co.'s No. 1 Pate, 342 ft. SE of NW line, 466 ft. SW of NE line, 466 ft. NW of SE line of 20.66-ac. tract, E. Smith Sur.
Spudded.
Humble O. & R. Co.'s No. 9-B Quittio, 1,391 ft. S of N line, 466 ft. WE line, L. A. Senchal Sur.
Rig up.
Humble O. & R. Co.'s No. 1 Handy, 466 ft. at right angles from E line, 466 ft. at right angles from SE line.
Drlg. shale 5,407 ft.

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Humble O. & R. Co.'s No. 3 Theis, 626 ft. SN line, 553 ft. NW line of 100-ac. tract, Goodrich Sur.
Drlg. shale 4,575 ft.

Humble O. & R. Co.'s No. 10 Reid, 1,544 ft. E of W line, 1,200 ft. S of N line, 933 ft. from No. 7, G. Goodrich Sur.
T.D. 5,566 ft.; I.P. 1,485,000 ft. of gas per day on ¼-in. choke; T.P. 1,200 lbs.

Humble O. & R. Co.'s No. 1 Lembarger, 328 ft. NE of SW line, 328 ft. SW of NE line, 363 ft. NW of SE line of 20.24-ac. tract in E. Smith Sur.
T.D. 5,565 ft.; 7-in. csg. 5,555 ft.; I.P. 11 bbls. per hour on ¼-in. choke; T.P. 250 lbs.; C.P. 900 lbs.

Humble O. & R. Co.'s No. 1-B Weindorf, 466 ft. E of W line, 259 ft. S of N line, G. Goodrich Sur.
T.D. 5,577 ft.; top sand 5,573 ft.; 7-in. csg. 5,577 ft.; W.O.C.; tested salt wtr.; P.B. 5,526 ft.; comp. for gas well with trace of distillate.

Vanderbilt—Jackson County

Phillips Pet. Co.'s No. 2 Tuney, 330 ft. each way out of E cor. of 64-ac. tract, or 414 ft. SE of No. 1, R. Musquiz Sur.
T.D. 5,103 ft.; attempted drill stem test, seat failed to hold; will core ahead.

Big Hill—Jefferson County

Yount Lee Oil Co.'s No. 1-B Pipkin & Davis, 2,225 ft. from E line and 2,385 ft. from N line of survey, Wm. McFadden Sur.
T.D. 5,627 ft.; reaming to cement 8⅝-inch csg.

Cleveland—Liberty County

Black Gold Pet. Oil Corp.'s No. 2 R. D. McDonald, 466 ft. W of most westerly E line and 466 ft. N of most northerly S line of survey, 933 ft. W of Gulf Prod. Co.'s No. 7-C Kirby Lbr. Co., T. Devers Sur.
Derrick.

Gulf Prod. Co.'s No. 10-C Kirby, 2,245 ft. from W line, 2,363 ft. from S line of John Pleasant Survey.
Drlg. sandy shale 3,918 ft.

William J. Colegrove et al's No. 1 State School Land & Dev. Co., 446 ft. from W line and 170 ft. from S line of survey, Clayton Harper Sur.
Location.

Esperson—Liberty County

General Crude's No. 1 Heavaty, 467 ft out of SE cor. of F. M. Gardner Sur.
Drlg. shale and lime 4,810 ft.

General Crude Oil Co.'s No. 21 Esperson.
Drlg. shale 6,910 ft.

General Crude Oil Co.'s No. 10 Davis, 2,000 ft. from E line, 660 ft. from S line of D. Kokernut Sur.
Abandoned.

Hankamer—Liberty County

Eastman-Ward's No. 1 R. E. Lee, 115 ft. from N line of lease and 76 ft. W of west bank of White Bayou, Geo. Stengler Sur.
Rig up.

Eljean Oil Co.'s No. 1 Thomas, 300 ft. W of E line, 300 ft. SN line, Levi Barrow Sur.
Location.

Eljean Oil Co.'s No. 2 S. E. Ezell, 130 ft. from N and S line of 10-ac. lease, Levi Barrow Sur.
Coring 3,430 ft.

Gulf Prod. Co.'s No. 1-B W. L. Bingle, 159 ft. E along S line of H.&T.C. Sur., thence 378 ft.
Drlg. hard shale 4,330 ft.

Gulf Prod. Co.'s No. 21 E. W. Boyt, 110 ft. from W line of Amos Allen Sur.
Location.

W. C. Hall's No. 1 Ainsworth, 150 ft. out of NE cor. of 50-ac. tract, Andrew Weaver Sur.
Rig up.

Sterling O. & R. Co.'s No. 1 George Stengler, 100 ft. out of most westerly NE cor. of Geo. Stengler Sur.
Coring sandy shale 3,000 ft.

Will Strozier et al's No. 1 Ezzell, 700 ft. N of S line, 150 ft. W of E line of Levi Barrow Sur.
Derrick.

Hull—Liberty County

Fondren & Snowden's No. 2 Humble-Hooks, 50 ft. from S line, 300 ft. NW of No. 1, J. Devore Sur.
S.D. 802 ft.

Markham—Matagorda County

Hamil & Hamil's No. 3 Hudson, 500 ft. E. 100 ft. S of NW cor., Blk. 15, H. Parker Sur.
T.D. 2,462 ft.; heaving shale; trying to wash to bottom.

Van Vleck—Matagorda County

Skelly Oil Co.'s No. 1 Turner, 523 ft. E from SW cor. of F. Metzler 135-ac. tract, thence 466 ft. S at R/A in Maria Cummins Sur.
13⅜-in. csg. 1,386 ft.; W.O.C.

Skelly Oil Co.'s No. 3 Cobb "B," 2,750 ft. from NW line, 2,900 ft. from SW line of M. Cummins Sur.
Drlg. shale 8,025 ft.

Conroe—Montgomery County

Humble Oil & Refg. Co.'s No. 2 Bailey, 3,412 ft. E of easterly W line, 633 ft. N of S line, R. Kuykendall Sur.
T.D. 5,208 ft.; comp. for gas well; T.P. 1,600 lbs.; C.P. 1,625 ft.

Sun Oil Co.'s No. 10 Keystone Mills.
Derrick.

Sun Oil Co.'s No. 16 Keystone Mills.
Drlg. sand and shale 4,373 ft.

Sun Oil Co.'s No. 19 Foster.
T.D. 5,125 ft.; testing.

Splendora—Montgomery County

Bryce McCandless et al's No. 1 Texas Long Leaf Lbr. Co., 330 ft. from N and E lines of the W½ of Blk. No. 8, Walker County School Land Sur.
Derrick.

Orange—Orange County

Trio Oil Co.'s No. 1 D. S. Comier, 69 ft. W of E line and 39 ft. S of N line of 6.83-ac. tract in W. M. Dyson Sur.
S.D. 3,005 ft.

Fort Neches—Orange County

Texas Co.'s No. 5-BA (Polk), 897.5 ft. S, 850 ft. W from most westerly NE cor. of "B" Lease.
T.D. 5,916 ft.; 7-in. csg. 5,885 ft.; perforating csg.

Texas Co.'s No. 5 Stark, 400 ft. from S and 125 ft. from E line of lease, M. E. Hall Sur.
T.D. 4,581 ft.; 7-in. csg. 3,703 ft.

Texas Co.'s No. 4-B Polk, 750 ft. S and 1,450 ft. W from NE cor. of lease, Jacob Beaumont Sur.
Location.

Texas Co.'s No. 6-B Polk, 750 ft. S and 250 ft. W from NE cor. of lease, Jacob Beaumont Sur.
Location.

Livingston—Polk County

Gem Oil Co.'s No. 4 Watt, 660 ft. N of No. 3, 990 ft. from W line of lease, A. Viesca Sur.
Top oil sand 4,237 ft.; 7-in. csg. 4,232 ft.; T.D. 4,242 ft.

Gem Oil Co.'s No. 6 Davis & Holmes, 65 ft. from W and 662 ft. from N line of survey, A. Viesca Sur.
Rig up.

Hawkeye Pet. Co.'s No. 2 Howard, 365 ft from E line of lease, 695 ft. N of No. 1 A. Viesca Sur.
Top oil sand 4,194 ft.; T.D. 4,216 ft.; 7-in. csg. 4,193 ft.

Humble O. & R. Co.'s No. 13 Granbury, 4,705 ft. SE of NW line, Sec. 10, 466 ft. SW of NE line of Sec. 10, A. Viesca Sur.
Drlg. shale 1,660 ft.

Humble Oil & Rfg. Co.'s No. 11 Granbury, 932 ft., SE of No. 10, 466 ft.; SW of NE line of Sec. 10, A. Viesca Sur
T.D. 4,229 ft.; 7-in. csg. 4,220 ft.; I.P. 7.4 bbls. per hour through ¼-in. choke; T.P. 905 lbs.; C.P. 275 lbs.

Humble Oil & Refg. Co.'s No. 12 Granbury, 933 ft. N of No. 9, A. Viesca Sur
Location

Kettle & Gymosky's No. 1 Kingsbury, 33? ft. from N and W lines of Blk. 19, A Viesca Sur.
Total depth 4,362 ft.; 6⅝-in. csg. 4,352 ft.; W.O.C.

Ownby Drlg. Co. et al's No. 1 Munson, 50 ft. N of the N line of 13-ac. tract, and 150 ft. W of W line of Munson 25-ac. tract, A. Viesca Sur.
Drlg. shale 4,156 ft.

Sun Oil Co.'s No. 7 Pratt, 466 ft. from N and W line of 195-ac. tract, A. Viesca Sur.
Derrick.

Sun Oil Co.'s No. 6 Pratt, 330 ft. from S line of lease, 660 ft. W of No. 2, A. Viesca Sur.
Rig up.

Refugio—Refugio County

Houston Oil Co.'s No. 28 P. H. Rooke, 550 ft. SW of No. 7, 660 ft. NW of No. 22, Thomas Mullen Grant.
T.D. 4,900 ft.; W.O.C.

Placedo—Victoria County

Barnsdall Oil Co. et al's No. 1 Gray, J. M. Bronson Sur.
T.D. 4,770 ft.; prepare to test.

Eastern States Pet. Co.'s No. 1 Williams, 330 ft. out of S cor. of 130-ac. tract, E Benavides Sur.
T.D. 4,748 ft.; shut in waiting storage.

Martex Oil Co.'s No. 1 Mitchell, 330 ft. S of W line, 330 ft. N of W line of 500-ac. tract, E. Benavides Sur.
T.D. 6,050 ft.; P.B. 5,485-99 ft.; testing.

E. L. Smith's No. 1 Lela, 330 ft. each way out of E cor. Lot 13, Wm. Rupley Sur.
S.D. 4,780 ft.; tested salt wtr.; prepare to drill deeper.

Sun Oil Co.'s No. 1 Marek, 330 ft. EW line, 330 ft. SN line of NW cor. of 113.5-ac. tract, S.A.&M.G. Sur. No. A-382.
Drlg. shale 810 ft.

Clay Creek—Washington County

Pompy et al's No. 1 Klatte, J. F. Perry League, 150 ft. each way out of NW cor. of 50-ac. tract.
Rig up.

Sun Oil Co.'s No. 16 Janner.
Drlg. shale 1,042 ft.

Louise—Wharton County

Pure Oil Co.'s No. 1 J. H. Roberts, 990 ft. SW and 660 ft. SE of N cor. of 80-ac. tract, Morris & Cummings Sur.
16-in. csg. 70 ft.

Pure Oil Co.'s No. 2 Weaver, 1,980 ft. SW, 990 ft. NW of E cor. of Sec. 33, J. M. Brownson Sur.
T.D. 5,162 ft.; 7-in. csg. 5,134 ft.

Shell Pet. Corp.'s No. 1 A. and E. Steves, 1,400 ft. E and 1,200 ft. S of NW cor. of 1,279.4-ac. lease, J. J. Dillard Sur.
Coring sandy shale 5,906 ft.

Pickett Ridge—Wharton County

Texas Co.'s No. 3-A Pierce, 1,320 ft. N, 38 degrees E from discovery.
Drlg. shale 4,616 ft.

Texas Co.'s No. 1 Riggoletz, 150 ft. W, 330 ft. S of NE cor., Sec. 30-17s-24e.

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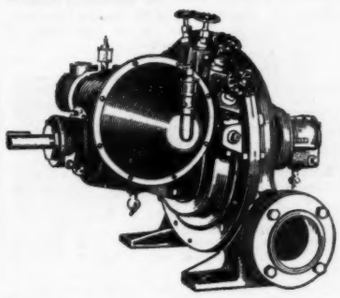

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1941

T.D. 9,586 ft. in sandy shale; prepare to run 7-in. csg.

LOUISIANA

Bay St. Elaine—Terrebonne Parish

Texas Co.'s No. 2 Bayou St. Dennis, 466 ft. N and 1,194 ft. W of SE cor. of Sec. 19-17-24.
Drlg. hard lime 9,136 ft.

Texas Co.'s No. 2 School Board, Sec. 16-22s-15e.
Location.

Texas Co.'s No. 10 State, 4,550 ft. E and 4,595 ft. S of NW cor. of Sec. 17-22s-15e.
Drlg. cap rock 5,995 ft.

Caillous Island—Terrebonne Parish

Texas Co.'s No. 27 State, Sec. 17-23s-20e.
Drlg. sandy shale 5,810 ft.

SOUTH LOUISIANA FIELDS

Black Bayou—Cameron Parish

Shell Pet. Corp.'s No. 25 Watkins, Sec. 18-12s-12w.
Rig up.

Shell Pet. Corp.'s No. 26 Watkins, 3,380 ft. W, 100 ft. S of NE cor. of Sec. 18-12s-12w.
Location.

Shell Pet. Corp.'s No. 24 Watkins, 2,832 ft. W, 695 ft. S of NW cor. Sec. 18-12-12.
T.D. 3,316 ft.; set whipstock at 3,301 ft.

Shell Pet. Corp.'s No. 3 State.
T.D. 6,191 ft.; sand showing oil.

Bosco—Acadia and St. Landry Parishes

Superior Oil Prod. Co.'s No. 3 Prejean, 3,715 ft. S, 886 ft. E of NW cor. of SE¼ of Sec. 24-8s-3e.
T.D. 8,607 ft.; I.P. 429 bbls. per day; T.P. 300 lbs.; C.P. 1,600 lbs.

Superior Oil Prod. Co.'s No. 10 Larcade, 1117 ft. S, 3,345 ft. E of NW cor. of Sec. 35-8s-3e.
T.D. 8,690 ft.; 7-in. csg. 8,673 ft.; I.P. 269 bbls. per day; T.P. 200 lbs.; C.P. 550 lbs.

Superior Oil Prod. Co.'s No. 8 Iseringhausen, 2,662 ft. S, 696 ft. E out of NW cor. of Sec. 35-8s-3e.
T.D. 8,709 ft.; I.P. 272 bbls. per day through 10/64-in. choke.

Superior Oil & Prod. Co.'s No. 1 M. Benoit, 1,165 ft. W of SE cor., 2,320 ft. N, Sec 34-8s-3e.
T.D. 8,645 ft.; Abnd. 8,645 ft.

Darrow—Ascension Parish

Humble O. & R. Co.'s No. 2 Gumble, 850 ft. E from center line of R-W along the Rose-Gumble property, 72 ft. NW at R/A Sec. 32-10s-2e.
T.D. 5,948 ft.; P.B. 2,725 ft.

Humble O. & R. Co.'s No. 4 Community, 4,826 ft. from NE cor. and 283 ft. S of N line at R/A, Sec. 33-10s-2w.
Digging cellar.

Cameron Meadows—Cameron Parish

Magnolia Pet. Co.'s No. 13 Cameron Meadows, Sec. 21-14s-13w.
Drlg. sandy shale 4,040 ft.

Magnolia Pet. Co.'s No. 12 Cameron Meadows, 423 ft. E of No. 11.
T.D. 3,324 ft.; resetting screen.

Burton Sutton Oil Co.'s No. 3 School Land, Sec. 16-14s-13w.
Rig up.

Burton Sutton Oil Co.'s No. 4 School Land, Sec. 16-14s-13w.
Derrick.

Choctaw Dome—Iberville Parish

Standard Oil Co.'s No. 1 Myrtle, 900 ft. N and 550 ft. W of SE cor. of SW¼ of Sec. 53-9s-11e.
T.D. 5,154 ft.; I.P. 53 bbls. per hour through ¾-in. choke; T.P. 540 lbs.

Zeni Oil Co.'s No. 1 Schwing, Sec. 19-17s-24e.
Rig.

Dog Lake—Terrebonne Parish

Texas Co.'s No. 11 State, 1,100 ft. N, 2,476 ft. W of SE cor. of Sec. 21-21s-16e.
S.D. 2,014 ft.

Four Isle—Terrebonne Parish

Texas Co.'s No. 8 La. Land & Expl. Co., 2,177 ft. E, 1,385 ft. S of NW cor. Sec. 24-21s-16e.
Rig up.

Texas Co.'s No. 5 State, 885 ft. S, 2,327 ft. E of NW cor. of Sec. 24-21s-16e.
Location.

Garden Island Bay—Terrebonne Parish

Texas Co.'s No. 16 Garden Island, Sec. 37-23s-22e.
T.D. 4,576 ft.

Texas Co.'s No. 12 State, 2,391 ft. S and 1,694 ft. W of NE cor. Sec. 107-23-32.
Rig up.

Gueydan—Vermillion Parish

Pure Oil Co.'s No. 6, Alliance Trust, 667 ft. E, 1,787 ft. S line of lease, Sec. 24-11s-1w.
T.D. 9,545 ft.; circulating mixing mud.

Hackberry—Cameron Parish

Gulf Refg. Co.'s No. 19 Erwin, 1,315 ft. W along S line of the SE cor. of Sec. and 960 ft. at R/A to S line, Sec. 12-12-10w.
Drlg. sand 6,410 ft.

Stanolind O. & G. Co.'s No. 14 Gulf Land, Sec. 14-12s-10w.
Drlg. plug.

Stanolind O. & G. Co.'s No. 15 School Land, Sec. 16-12s-10w.
Drlg. salt 7,250 ft.

Texas Co.'s No. 18 State, N 13 deg. 20 ft. W, 4,000 ft. from No. 13, Sec. 44-12s-9w.
Location.

Texas Co.'s No. 14 State, 500 ft. SE of No. 13, Sec. 13-12s-10w.
Drlg. sand and lime 5,686 ft.

Yount Lee Oil Co.'s No. 1-A Gulf Land, 2,000 ft. S and 50 ft. E of the NW cor. of Sec. 22-12-10.
Rig up.

New Iberia—Iberia Parish

Canal Oil Co.'s No. 4 Bernard, Sec. 54-12s-7e.
Drlg. shale 2,000 ft.

Harrison & Abercrombie's No. 4 Schwing, Sec. 56-12s-7e.
Rig up.

Helis' No. 1 Sabatoir, 900 ft. N and 1,310 ft. E of SE cor. of Sec. 53-12s-7e.
Drlg. salt 3,631 ft.; no report.

Texas Co.'s No. 1-B Hanzen, 1,418 ft. NE along NW line from most W cor, thence SE at right angle, Sec. 54-12s-7e.
Rig up.

IOWA—Calcasieu and Jeff Davis Parish

Shell Pet. Corp.'s No. 17 Heyd.
T.D. 6,943 ft.; I.P. 720 bbls. per day through 16/64-in. choke.

Jennings—Acadia Parish

Abshire-Bolyard's No. 3 Clemonds, 3,500 ft. N, 95 ft. E of SW cor. Sec. 46.
Drlg. shale and gumbo 1,285 ft.

Yount Lee Oil Co.'s No. 15 Houssiere-Latriele.
Drlg. sand and shale 4,910 ft.

Lake Hermitage—Plaquemines Parish

Humble O. & R. Co.'s No. 1 State Land, 1,080 ft. E, 200 ft. N of Texas Gulf No. 6, Sec. 11-18s-25e.
10¾-in. csg. 1,975 ft.; drlg. shale 2,196 ft.

Lake Barre—Terrebonne Parish

Texas Co.'s No. 25 Lake Barre, Sec. 40-21s-19e.
Prepare to sidetrack.

Leesville—Lafourche Parish

Texas Co.'s No. 23 Leesville, 975 ft. S, 1,975 ft. W of NW cor. of SW¼ Sec. 26-21-22.
Location.

Texas Co.'s No. 32 Leesville, 890 ft. S, 2,484 ft. W of NE cor. SE¼ Sec. 27-21s-22e.
Rig up.

Texas Co.'s No. 33 Leesville, 1,590 ft. S, 2,484 ft. W of NE cor. SE¼ Sec. 27-1s-22e.
Rig up.

Texas Co.'s No. 37 Leesville, 1,266 ft. N, 103 ft. W of SE cor. NE¼ Sec. 27-21s-22e.
Abnd. 5,020 ft.

Roanoke—Jefferson Davis Parish

Glassel et al's No. 1-A La. Irrigation Mill Co., Sec. 2-9s-W line.
T.D. 7,430 ft.; recovered stuck drill stem.

Glassel et al's No. 1 La. Irrigation Mill Co., 695.5 ft. E and 475 ft. N of SW cor. Sec. 1-9s-4w.
10¾-in. csg. 2,250 ft.

Humble Oil & Refg. Co.'s No. 4 Devilbiss, 440 ft. S of N line and 440 ft. W of E line of Sec. 14-9s-4w.
Drlg. shale and lime 9,071 ft.

Humble O. & R. Co.'s No. 1 Clayton, 2,223 ft. from S line, 440 ft. from E line, Sec. 16-9s-4w.
Temp. abnd. 9,142 ft.

Humble O. & R. Co.'s No. 2 C. N. Taylor, 1,320 ft. E, 440 ft. S of NW cor. of SW¼ Sec. 12-9s-4w.
Rig up.

Humble O. & R. Co.'s No. 1 Nelson Thomas, 880 ft. W of No. 2 Kratzer, 440 ft. N and W of SE cor. of 200-ac. tract.
T.D. 10,570 ft.; well tried to blow out.

Shell Pet. Corp.'s No. 1 Jarnigan, 330 ft. E, 660 ft. S, NW cor. Sec. 12-9s-4w.
Cored hard shale 10,418 ft.

Sweet Lake—Calcasieu Parish

Pure Oil Co.'s No. 13 Gulf Land, 800 ft. S, 66 deg. 42 ft. E of No. 12, Sec. 13-13-13.
Moving in tanks and bailers.

Sulphur—Calcasieu Parish

Union Sulphur Co.'s No. 808 fee.
6⅝-in. csg. 4,851 ft.; T.D. 4,859 ft.

Union Sulphur Co.'s No. 812 fee.
Drlg. sandy shale 3,613 ft.

Union Sulphur Co. s No. 811 fee.
T.D. 2,824 ft.; I.P. 500 bbls. per day.

White Castle—Iberville Parish

Shell Pet. Corp.'s No. 8 Wilbert.
Coring 5,955 ft.

Shell Pet. Corp.'s No. 1 White Castle Shingle Co., 1,320 ft. W, 100 ft. S from NE cor. of lease.
T.D. 5,165 ft.; reaming.

Shell Pet. Corp.'s No. 1 Adams. 2,240 ft. N, 100 ft. E of SW cor. of lease.
T.D. 8,919 ft.; 7-in. csg.; P.B. 8,879 ft.

Miscellaneous Wildcats

TEXAS

Austin County

Paul English et al's No. 1 Felix Guhn, 1,000 ft. S, 360 ft. E from NW cor. of 71-ac. tract, D. Chomel Sur., 1 mile SE of Kinney.
Rig up.

R. L. Wheelock et al's No. 1 Nancy Harrigat, 330 ft. each way out of the east cor. of the 75-ac. tract, Benj. Babbitt Sur.
T.D. 2,586 ft.; pulled in derrick skidded 60 ft.; drlg. shale 1,810 ft.

T. F. Wood et al's No. 1 Trenchman, 330 ft. from SE line of a 50-ac. tract, James Cummins Sur.
S.D. 750 ft.

Brazoria County

George Strake's No. 2 Truska, 991 ft. W of No. 1, H.T.&B. Sur., Sec. 7.
S.D. 6,000 ft.

Showers & Moncrief's No. 1 Hughey, 5,500 ft. NW of discovery well, in center of Lot 18, H.T.&B. Sur., Sec. 29, Abst. 292.
Location.

Texas Co.'s No. 1 Freeport Sulphur Co., 2,764 ft. N, 1 deg., 40 ft. W and 1,134 ft. S, 88 deg., 20 ft. W of NW cor. of S. F. Austin Sur., Abst. No. 35, being in the Conception Areola Sur.
P.B. and sidetracked at 2,983 ft.; drilled to 2,991 ft.

Chambers County

C. B. Bunte's No. 1 Simon, 1,980 ft. WE line, 990 ft. SN line, Sec. 33, T.&N.O. Sur.
Rig up.

Calhoun County

Continental Oil Co.'s No. 2 American National Realty Co., 660 ft. from NW line, 660 ft. from NE line of Sec. 6, Blk. C, Pedro Garcia Sur.
S.D. 6,522 ft.

Colorado County

Clyde Creighton et al's No. 1 Witte, 150 ft. S and E of most westerly NW cor. of H. White Sur.
10-in. csg. 341 ft.; T.D. 352 ft.

Coyle & Concord's No. 1 fee, 550 ft. from N line, 1,950 ft. from E line of Sec. 45, I.&G.N. Sur.
10¾-in. csg. 610 ft.; T.D. 698 ft.

Mid-Continent Oil Co.'s No. 1 D. E. Burnhardt-Scherz, 330 ft. out of the most southerly SE cor. of a 270-ac. tract, J. Cummins Sur.
Abnd. 4,004 ft.

Fayette County

Lewis Franklin's No. 1 V. Dybala, center of 75-ac. lease, A. Thompson Sur.
Location.

Fort Bend County

W. A. Shafer et al's No. 1 V. B. Bortash, 693 ft. SW of NE line and 1,003 ft. NW of SE line of Sec. 52, H.&T.C. Sur.
S.D. 2,900 ft.

George White et al's No. 1 M. M. Cravins, 1,000 ft. from N, 300 ft. W of SW cor. of survey, B.B.B.&C. Sur. No. 8.
Rig up.

Grimes County

Dillinger & Hammer's No. 1 L. P. Lane, 150 ft. S of N line and 150 ft. W of E line of 65-ac. tract, R. P. Stewart Sur.
Derrick.

Hubert Holt et al's No. 1 Simon Fuqua, 1,200 ft. N of S line and 400 ft. W of E line of 177-ac. lease and survey, Moses Evans Sur.
S.D. 3,080 ft.

Dr. Marshall et al's No. 1-B Todd, 300 ft. from E line and 175 ft. from N line of 150-ac. tract in extreme NW cor. of county (25 ft. N of No. 1).
7-in. csg. 2,678 ft.; T.D. 2,815 ft.

Patton et al's No. 1 Yeager, 1,000 ft. W of E line, 170 ft. S of N line of 53-ac. tract and survey, A. Ruseolle Sur., NW of Iola Sur.
S.D. 1,000 ft.

Wallace and Jordan's No. 1 Henderson, 330 ft. out of most NE cor. of 40-ac. tract, Chattick & Porter Sur.
Drlg. 1,050 ft.

Harris County

Cockburn Oil Co.'s No. 1 R. E. Brooks, 330 ft. N of N bank of Bayou, 330 ft. from WL of R. E. Brooks, "A" tract.
Drlg. lime 4,210 ft.

C. C. Foster et al's No. 1 H. K. Johnson, 2,000 ft. from S line and C of E and W lines of G.C.&S.F. Sur.
Drilled 25 ft. and S.D.

Stanolind Oil & Gas Co.'s No. 1 F. J. Burkey, C of Lot 15, Blk. 105, H.T.&B. Sur. No. 5.
Rig up.

Stanolind Oil & Gas Co.'s No. 1 C. F. Gibson, C of Lot 9, Blk. 41, H.T.&B. Sur. No. 5.
16-in. csg. 110 ft.

Stanolind Oil & Gas Co.'s No. 1 J. W. Horlow, C of Lot 10, Blk. 32, H.T.&B. Sur. No. 5.
Rig up.

Stanolind Oil & Gas Co.'s No. 1 Ed Wells, C of Lot 3, Blk. 16, H.T.&B. Sur. No. 5.
Rig up.

Stanolind O. & G. Co.'s No. 1 First Natl. Bank of Houston, 950 ft. from NE line, 990 ft. from SE line of 119.6-ac. tract, Callahan and Vance Sur.
T.D. 4,688 ft.; prepare to make drill stem test.

E. E. Young, tr.'s No. 2 P. S. Griffith, 2,476 ft. S of N line, 2,030 ft. E of W line of A. R. Bodman Sur.
S.D. 1,465 ft.

Jackson County

A. M. Harris' No. 1 Whitley, 300 ft. out of SE cor. of F. G. Keller Sur.
Location.

Shell Pet. Corp.'s No. 1 Combs, 466 ft. EW line, 2,500 ft. NE line of 242.75-ac. tract, M.&C. Sur., Sec. 33.
T.D. 5,650 ft.; 7-in. csg. 5,630 ft.; drlg. plug.

Jasper County

Marathon Oil Co.'s No. 1 Jasper County Lumber Co., 330 ft. out of NE cor. of 176.5-ac. tract 5 miles SE of Jasper, T. C. Holmes Sur.
Drlg. shale and lime 4,830 ft.

Jefferson County

Humble O. & R. Co.'s No. 1-B McFaddin, 330 ft. E of W line of 240-ac. tract, 366 ft. NW of Gulf of Mexico, also 50 ft. NW of N of Highway, Sec. 370, C. F. Code Sur.
Drlg. shale 3,341 ft.

Sun Oil Co.'s No. 1 Hebert & Braussard, 6,890 ft. NW along SW line and 660 ft. NE at right angles to SW line, B. Blackman Sur., Abst. No. 3.
Coring 7,250 ft.

Liberty County

R. M. Bruner et al's No. 1 N. Bell, 150 ft. from N line and 150 ft. from W line of Bell's 187-ac. tract, H.&T.B. Sur. No. 4.
Rigging up.

Extension Oil Co.'s No. 1 J. A. Lovett, 330 ft. from E and 600 ft. from S line of lease, P. P. Deevers Sur.
S.D. 4,048 ft.

D. H. Furse's No. 1 J. F. Kover, 300 ft. out of SW cor. of 100-ac. tract, J. R. Mayhon Sur.
Location.

Liberty-Independent Oil Co.'s No. 1 J. M. Neal, 3,550 varas from E line and 505 varas from N line of Samuel Strong Sur.
S.D. 4,198 ft.

A. L. Maxwell's No. 1 M. P. Hinchliff, 300 ft. from E line and 1,000 ft. from the N line of survey, H.&T.C. Sur., Sec. 10a.
T.D. 5,588 ft.; cmtd. back to 5,494 ft.; twisted off drill stem at 2,900 ft.; S.D.

Peveto et al's No. 1 Palmer, Joseph Former Sur.
Drlg. shale 5,165 ft.

Thomas et al's No. 1-A Eicke, 660 ft. from W line and 2,350 ft. from S line of tract in Green Sur.
T.D. 5,047 ft.; 6⅝-in. csg. at 5,029 ft.

Turnbull & Irwin's No. 1 Cox, 1,000 ft. from the E line and 200 ft. from S line of 108.2-ac. lease, F. J. G. Smiley Sur.
Location.

Matagorda County

Continental Oil Co.'s No. 1 Feife, J. S. Criswell Sur., 3,000 ft. E of W line, 2,800 ft. N of S line of survey.
T.D. 6,073 ft.; 11¾-in. csg. 6,072 ft.; W.O.C.

Dr. Griffith's No. 1 fee, 3,000 ft. from E line and 3,000 ft. from W line of Wm. H. Bell Sur.
Rig up and S.D.

Helmerich & Payne's No. 1 Hawkins, 850 ft. S, 70 deg. W of Cockburn Oil Co.'s No. 6 Hawkins.
T.D. 5,922 ft.; P.B. 5,300 ft.; well sidetracked at 5,483 ft.

Horace M. Smith, Inc.'s No. 1 Wadsworth ranch, 150 ft. out of S cor. of Lot No. 8, S. R. Fisher Sur.
T.D. 8,418 ft.; pulled tubing; prepare to deepen.

Montgomery County

Amester Drlg. Co.'s No. 1 T. S. Foster, 1,282 ft. N of S line, 754 ft. E of W line of Blk. 45, J. M. De La Garza Sur.
Derrick.

Wm. Thompson's No. 1 J. V. Scott, 530 ft. NW of Woodward-Smith and Cooper's No. 1 J. V. Scott, Frances Wheeler Sur.
Location.

Travis Baker et al's No. 1 Foster Estate, 1,200 ft. E of W line and 700 ft. S of N line of Blk. No. 50, J. M. De La Garza Sur.
Derrick.

Mid-Texas Oil Co.'s No. 1 Delta Land & Timber Co., 560 varas from W line, 200 varas from S line of Robert F. Oliver Sur.
Drlg. 550 ft.

George C. Schmidt's No. 1 Delta Land & Timber Co., 2,800 ft. N, 1,100 ft. E of SW cor. of tract, William McBride Sur.
Rig up.

T. T. Word, trustee's No. 1 Delta Land & Timber Co., John Hostetter Sur.
S.D. 3,676 ft.; abnd.

Orange County

Blue Line Oil Co.'s No. 1 J. E. Peet Richard, 900 ft. W of E line and 150 ft. S of N line of the most easterly NE cor. of 138-ac. tract, Ballou Sur.
Location.

Blue Line Oil Co.'s No. 1 Godwin, Richard Ballew Sur., 300 ft. from E line and 180 ft. from NE line of Godwin 20-ac. tract.
S.D. 2,770 ft.

Coker Oil Co.'s No. 1 S. T. Mansfield, 500 ft. S, 500 ft. W from NE cor. of 80-ac. tract, J. W. Hall Sur.
8-in. csg. 140 ft.; drlg. shale 700 ft.

Ellis Oil Co.'s No. 1 G. W. Pell, 100 ft. from N and 300 ft. from W line of Pell tract in the J. M. Henerie Sur.
S.D. 2,035 ft.

Polk County

Howard Daily et al's No. 1 Z. B. Knox, 1,450 ft. W and 1,920 ft. S of NE cor. of F. Chairs Sur., 16 miles NE of Corrigan.
S.D. 60 ft.

J. F. Anderson's No. 1 E. L. Duke (O.W. D.D.), 400 ft. from E and 350 ft. from S of SW cor. of P. Michelick 80-ac. lease, Abst. 59, P. J. Mineral Sur.
Waiting on a new mud pump; T.D. 5,304 ft.

J. W. Leggett et al's No. 1 Bergman, C of 294-ac. tract, or 1,100 ft. W of H.E.&W.T. R.R., J. T. Pinkney Sur.
S.D. 4,000 ft.

Dick Schwab's No. 1 Lynch, 330 ft. out of NW cor. of 200-ac. tract in the George Jameson Sur.
Location.

Refugio County

Cecil Hagen et al's No. 1 Edith Clarkson,

1,736 ft. from N line, 3,820 ft. from E line of J. Coughlin Sur.
Location.

Robertson County

H. L. Patton's No. 1 H. Ely, located on a 616-ac. tract, A. Manchola Sur.
S.D. 3,820 ft.

San Jacinto County

Ralph Sturam et al's No. 1 R. B. Love et al, 475 ft. S of N line and 2,000 ft. W of E line of 177-ac. tract, Drury McGee Sur.
Moving in rig.

Trinity County

Gulf Prod. Co.'s No. 5 Trinity County Lbr. Co., 1,017 ft. S of NE cor. of H. Y. Rook Sur., 444 ft. EW line, O. Peterson Sur.
Junked hole; skidded derrick 12 ft. N; rig up.

Victoria County

Texas Co.'s No. 1 J. J. Warden, 4,200 ft. N, 55 degrees E and 486 ft. N, 35 degrees W from SW cor. of Warden ranch, Edward McDonough League.
10-in. csg. 1,015 ft.; T.D. 1,022 ft.

Washington County

C. J. Laas' No. 1 T. Weinert, 1,840 ft. SW from E cor. of survey, thence 250 ft. NW at right angles, T. P. Borden Sur.
Rig up.

Wharton County

Navarro Oil Co.'s No. 1 Schoellman, 330 ft. S of S and E lines, 1,238 ft. from W line of Nasario Mansha Sur.
Drlg. sandy shale 1,920 ft.

Pure Oil Co.'s No. 1 Paige, 1,397 ft. NE and 467 ft. SE from W cor. of 159.27-ac. lease, James Pirie Sur.
Bldg. road.

Sterling Oil & Refg. Co.'s No. 1 Frank Janik Sr., 1,859 ft. from N line, 467 ft. W from SE cor. of Janik tract, Johathan Scott Sur.
Drlg. shale 5,793 ft.

SOUTH LOUISIANA

Acadia Parish

Continental Oil Co.'s No. 1 T. Ortego, 990 ft. S, 500 ft. E of NW cor. SW¼ Sec. 28-7s-2w.
Deepened to 8,513 ft.; flowing 300 bbls. of fluid per day, est. 60 per cent oil; not cleaned.

Beauregard Parish

Richardson & Martin's No. 1 Southwest Lbr. Co.
Location.

Calcasieu Parish

Fred Oil Co.'s No. 2 Faizt, 262 ft. E and 33 ft. S of NW cor. SE¼ Sec. 26-8s-10w.
S.D. 3,575 ft.

Fohs Oil Co.'s No. 1 Airhart, 275 ft. W and S of NE cor. SW¼ SE¼ Sec. 14-9s-8w.
Fishing 7,967 ft.

Nicholas McCaleb's No. 1 Grey, 2,200 ft. S, 1,200 ft. E of NW cor. Sec. 22-8s-13w.
S.D. 1,565 ft.

Texas Co.'s No. 12 State, 2,311 ft. N, 1,906 ft. E of SW cor. of Sec. 12-9s-8w.
Location.

Texas Co.'s No. 5 Nickerson, 2,826 ft. N, 3,192 ft. W of SE cor. of Sec. 12-19s-8w.
T.D. 6,732 ft.; swabbing.

Texas Co.'s No. 6 Nickerson, 287 ft. N, 389 ft. W of SE cor. of NW¼ Sec. 12-19s-8w.
T.D. 6,789 ft.; P.B. 6,704 ft.

Union Sulphur Co.'s No. 13 State, 1,464 ft. E, 2,088 ft. N of SW cor. of Sec. 12-9s-8w.
Location.

Union Sulphur Co.'s No. 1 Prairie Land & Canal Co., 1,312 ft. S, 610 ft. W of NE cor. of Sec. 1-11s-9w.
Drlg. shale 4,220 ft.

Union Sulphur Co.'s No. 12 State.
Drlg. sand and lime 4,993 ft.

Union Sulphur Co.'s No. 3 Castle, 1,350 ft. W, 150 ft. N of SE cor. of NW¼ Sec. 14-9s-8w.
Drlg. shale 6,410 ft.

Union Sulphur Co.'s No. 3 Mayo-Reeves, 1,064 ft. S and 1,041 ft. E of NW cor. of Sec. 12-9-8.
Drlg. shale 6,625 ft.

Union Sulphur Co.'s No. 3 Powell, 2,383 ft. S, 2,901 ft. E of NW cor. Sec. 13-9s-8w.
Location.

Union Sulphur Co.'s No. 2 Mayo Reeves.
Drlg. shale 6,430 ft.; no report.

Union Sulphur Co.'s No. 7 State, 1,316 ft. N and 199 ft. E of the SW cor. of Sec. 12-9s-8w.
Location.

Wheeler Oil Corp.'s No. 1 School Lot, 1,708 ft. E, 1,325 ft. N of SW cor. Sec. 16-9s-7w.
Drlg. shale 5,930 ft.

Cameron Parish

Magnolia Pet. Co.'s No. 1 J. B. Broussard, 330 ft. E and S, out of NW cor. of the SW¼ of SE¼ of Sec. 13-12s-9w.
T.D. 7,890 ft.; stuck drill stem second time, fishing.

Steinberger Pet. Co.'s No. 1 Drew, 330 ft. out of NW cor. NE¼ of Sec. 26-10s-11w.
Location.

Southern Sulphur Co.'s No. 1 State, Sec. 39-15s-10w.
S.D. 3,215 ft.

East Baton Rouge Parish

Superior Oil & Prod. Co.'s No. 1 Duplanter-Community, 1,500 ft. westerly along the N line from the NE cor. of D. A. and E. A. Duplanter's 130.7-ac. tract, thence 330 ft. at R/A.
9⅝-in. csg. 7,744 ft.; coring shale and lime 7,802 ft.

East Feliciana Parish

Thompson Creek Oil Co.'s No. 1 Fannie Noland, 2,600 ft. E and 1,580 ft. N of SW cor. Sec. 70.
S.D. 1,589 ft.

Iberia Parish

Jefferson Lake Oil Co.'s No. 1 State, Twp. 12s-5e.
Drlg. shale and lime 4,930 ft.

Little Pigeon Oil Co.'s No. 1 McHugh, 1,300 ft. S, 229 ft. W of NE cor. Sec. 26-12s-10e.
S.D. 3,165 ft.

Meade Oil Co.'s No. 1 Hamilton, near town of Loze, in the NW cor. of parish, Sec. 28-12-5.
S.D. 200 ft.

Texas Co.'s No. 1 State Fausse Point.
Drlg. sandy shale 6,030 ft.

J. S. Watterman's No. 1 St. Julian, 75 ft. E of W line of property and 50 ft. N of Lake Poigneur, Sec. 4-12s-5e.
Drlg. shale 1,930 ft.

Jefferson Davis Parish

Howard Naylor et al's No. 1 Johnson-Bordeaux, 1,734 ft. N, 52 deg. N, 45 min. E, and 1,853 ft. S, 37 deg. 15 min. E out of SW cor. Sec. 39-10s-3w.
S.D. 810 ft.

LaFourche Parish

Coastal Oil Co.'s No. 2 Constantine, 1,476 ft. N, 809 ft. E of SW cor. Sec. 26-21-32e.
Location.

St. Bernard Parish

Emerald Pet. Corp.'s "Shell Beach Properties" No. 1, on S edge of Bayou Louis, Sec. 31-13s-15e.
T.D. 7,385 ft.; stuck drill stem; P.B. to 1,300 ft.; to sidetrack.

St. Martin Parish

Texas Co.'s No. 1 State Lake, 5,180 ft. E, 350 ft. N of SW cor. of Sec. 10-10s-9e.
Rig up.

Texas Co.'s No. 7 St. Martin Land, 2,042 ft. N, 500 ft. W of SE cor. of Sec. 17-8s-7e.
Drlg. shale and lime 8,501 ft.

Plaquemines Parish

Lo-Tex Expltn. Co.'s No. 1, Sec. 72-14s-24e.
15½-in. csg. 190 ft.

Southern Sulphur Co.'s No. 1 Manhattan Fruit Co.
S.D. 339 ft.

Venice Oil Co.'s No. 1 Manhattan Fruit, Sec. 26-21s-30e.
S.D. 339 ft.

Vermillion Parish

Delcambre & Shelton's No. 1 Adam Delcambre, south degrees E, 825 ft. from most northerly cor. of irregular Sec. 63-17-5.
Drlg. gumbo 1,442 ft.; no report.

Terrebonne Parish

Dulac Oil Co.'s No. 1 Bourg, Sec. 10-20-17e.
10¾-in. 760 ft.; W.O.C.

LA.-ARK. WILDCATS

(Rotary operations unless otherwise designated)

NORTH LOUISIANA

Avoyelles Parish

Bell Oil Co.'s No. 2 Thompson-Koltz, 450 ft. S, 350 ft. E, NW cor. Sec. 11-2n-5e.
Partly R.U. and S.D.

Southern Star Pet. Co.'s No. 1 O. G. Boyette, Sec. 28-3-5e.
S.D. 3,875 ft.

Bienville Parish

N. V. Duncan et al's No. 1 J. Miller, 150 ft. N, 450 ft. E, SW cor. NW Sec. 9-18-7.
Reaming to bottom 1,825 ft.

Bossier Parish

Ark.-La. Gas Co.'s No. 3 R. O. Roy, 748 ft. N, 1,270 ft. E, SW cor. Sec. 18-17-11.
Set 13⅜-in. 236 ft.

Bossier O. & G. Co.'s No. 3 Sherrill, 330 ft. N and W, SE cor. Sec. 13-19-12.
Drlg. 1,495 ft.

Hawkins & Bird's No. 1 Scanland, 600 ft. S, 200 ft. E, NW cor. SE SE Sec. 32-20-11.
Dry and abnd. 499 ft.

W. A. Kirkland's No. 1 Jarrett & McKeller, 330 ft. N and W, S cor. NW NW Sec. 3-21-13.
S.D.; W.O. 2,650 ft.

Leonard Co.'s No. 1 Pearson, 250 ft. S and E of C Sec. 22-21-14.
T.A. 3,421 ft.

W. E. Neil's No. 1 Curtis Plant, Sec. 19-17-12.
Drlg. 225 ft.

Plain Dealing Synd.'s No. 1 Dodson, 330 ft. S and E, NW cor. SW SE Sec. 25-23-13.
Coring 3,092 ft.

Producers O. & G. Co.'s No. 1 Edwards, 660 ft. N and W, SE cor. Sec. 27-18-11.
Set 12½-in. 208 ft.

R. L. Skidmore et al's No. 1 Davis, Sec. 12-18-13.
Reaming to bottom 2,200 ft.; (corrected).

Caddo Parish

Nick Babare's No. 2 Gibbs, 175 ft. E, 275 ft. S, NW cor. NE SE Sec. 16-20-15.
Comp. pumping 30 bbls. 2,204 ft.

J. Ed Bailey, tr.'s No. 1 Hartzo, NW cor. NE NW Sec. 28-22-16.
S.D. 1,236 ft.

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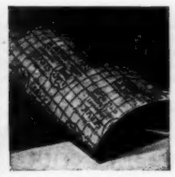

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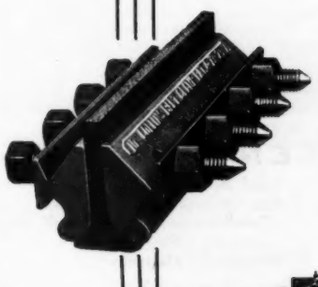

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By E. N. Klemgard

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The properties and chemistry of the soda base, sett, lead, zinc, sulphur, and aluminum base preparations are explained. Testing and analytical methods are thoroughly described. The large number of formulas for making greases is especially valuable. Many patents are described. The various materials used in greasemaking are given, together with methods for their inspection.

"Lubricating Greases" is recognized as a standard text on that subject. The reliable and complete information it contains makes this book worth many times its cost.

CONTENTS

Manufacture of Cup Greases
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THE OIL AND GAS JOURNAL
Tulsa, Oklahoma

Cal-La. Devel. Co.'s No. 1 Glassell, NW NE Sec. 11-19-15.
Abd.; will not drill.
Holly Oil Co.'s No. 1 Thigpen & Herold, Sec. 15-20-15.
S.D. 2,283 ft.
F. D. Hyde's No. 1 Thigpen & Herold, 350 ft. S and E, C Sec. 5-15-15.
S.D. 1,175 ft.
A. D. King, tr.'s No. 1 Roach, 641 ft. E, 375 ft. N, SW cor. SE Sec. 4-14-16.
Tested S.W.; arranging to deepen from 2,712 ft.
Leonard Co.'s No. 1 Gamm, NE SE Sec. 35-21-15.
Drlg. 2,232 ft.
Leonard Co.'s No. 1 G. Muslow, C NW SE Sec. 17-20-15.
Comp. 500,000 ft. gas 821 ft.
Leonard Co.'s No. 1 Muslow, NE cor. NW NE Sec. 9-20-15.
T.A. 2,231 ft.
Murray Oil Co.'s No. 2 Noel, 495 ft. S, 735 ft. E, NW cor. SW Sec. 15-20-15.
W.O.S.R. 2,290 ft.
Press & Lambert's No. 2 Hughes, 350 ft. N and W of C Sec. 15-20-15.
W.O.S.R. 2,200 ft.
Puritan Oil Co.'s No. 1 Land, 550 ft. E, 250 ft. N, SW cor. Sec. 4-20-15.
Rigging up.
Pyramid O. & G. Co.'s No. 2 Winters, 330 ft. N, 990 ft. W, SE cor. Sec. 4-18-16.
Set 10-in. 320 ft.; drlg. 1,595 ft.
A. C. Scott et al's No. 1 Noel Est., 330 ft. S and E, NW cor. Sec. 22-20-15.
W.O.S.R. 2,261 ft.
Shreveport Oil Corp.'s No. 1 Caddo Levee Board, 300 ft. S, 150 ft. W, NE cor. Sec. 8-20-15.
Set 10-in. 90 ft.; drlg. 1,400 ft.
Shreveport Oil Corp.'s No. 5-B Muslow, Sec. 4-20-15..
Comp. pumping 100 bbls. 2,195 ft.
Simplex Oil Co.'s No. 7 Thomas, 200 ft. N and E of C Sec. 15-20-15.
Comp. pumping 90 bbls. 2,202 ft.
Texas Co.'s No. 2 Thigpen, 300 ft. S and E, C Sec. 15-20-15.
Drlg. 2,206 ft.
Triangle Agency's No. 1 Ellerbe, 872 ft. E, 80 ft. N, SW cor. NW Sec. 4-20-15.
Coring 2,130 ft.
C. A. Tooke's No. 1 Kinheman, 581 ft. S, 136 ft. W, NE cor. NW SW Sec. 15-20-15.
Rigging up.
Ty-Stan, Inc.'s No. 1 Jolly, 400 ft. S and E NW cor. SW SW Sec. 22-22-15.
Set 10-in. 100 ft.; drlg. 600 ft.

Caldwell Parish

Caldwell Drlg. Co.'s No. 1 Gore, 600 ft. W, 380 ft. S, NE cor. SE Sec. 30-12-3e.
Drlg. 80 ft.
G. D. Davis' No. 1 La.-Central Lbr. Co., Sec. 14-11-3e.
S.D. 1,800 ft.
G. W. Zeigan et al's No. 1 La.-Central Lbr. Co., 175 ft. S and E, NW cor. SW SW Sec. 25-13-3e.
S.D. 1,200 ft.

Catahoula Parish

McIntyre et al's No. 1 Tensas, 1,740 ft. S, 990 ft. E, NW cor. Sec. 18-10-6e.
Set 10-in. 347 ft.

Claiborne Parish

E. T. Oakes' No. 1 H. W. Patton Est., 660 ft. S and W, NE cor. Sec. 1-20-5w.
S.D. for wtr., 2,271 ft.

De Soto Parish

E. B. Bird et al's No. 1 J. H. Johns, 330 ft. N and W, center Sec. 26-14-6.
S.D.; W.O. 2,630 ft.
DeSoto Pet. Co.'s No. 1 B. Y. Wemple, C S½ SE NE SW Sec. 14-12-11.
Arranging to set csg. 2,590 ft.
P. G. Fraley et al's No. 1 G. R. Stell, 330 ft. S and W, NE cor. Sec. 5-12-16.
R.U. and S.D.
Leslie Prod. Co.'s No. 1 Ramsey, 150 ft. N and W of C Sec. 36-11-11.
Set 10-in. 45 ft.
National Oils, Inc.'s No. 1 B. Y. Wemple, NW SW Sec. 14-12-11.
S.D. 120 ft.
M. L. Stephens' No. 1 Alston, 345 ft. S, 270 ft. W of C Sec. 11-11-16.
Tested dry 1,405 ft.; S.D. 1,620 ft.

East Carroll Parish

Century Oil & Drlg. Co.'s No. 1 Olive Dell, 660 ft. S, 300 ft. W, NE cor. Sec. 56-21-21e.
Dry and abnd. 2,005 ft.

Grant Parish

Alexander et al's No. 1 Maxwell, Sec. 9-9-1e.
S.D. 525 ft.

Jackson Parish

American Liberty Oil Co.'s No. 1 Lusk, C NE NE Sec. 1-16-1w.
T.A. 3,827 ft.

La Salle Parish

Fred W. Hensley's No. 1 Urania, Sec. 7-10-2e.
Rigging up.
H. L. Hunt, Inc.'s No. 1-A King, 225 ft. S, 210 ft. E, NW cor. NE NW Sec. 36-10-1e.
Recmtd. 6-in. 1,524 ft.

Lincoln Parish

Herman L. Brown's No. 1 Monstead, 1,320 ft. S, 660 ft. E of C Sec. 10-17-4w.
Set 12-in. 480 ft.; S.D. 1,250 ft.

Madison Parish

San. Land & Exploration Co.'s No. 1 Delta Land Co., Sec. 1-17-12e.
Set 12-in. 480 ft.; S.D. 738 ft.

Morehouse Parish

J. H. Gibson, tr.'s No. 1 Thomas, 330 ft. S and W, NE cor. Sec. 16-22-7e.
S.D. 2,458 ft.
Southern Carbon Co.'s No. 16 Tensas, Sec. 34-21-4e.
Drlg. 50 ft.
Zeiger & Bacon's No. 2 Crossett Lbr. Co., 3,870 ft. N, 505 ft. E, SE cor. SE SW of Sec. 36, in Sec. 41.
S.D. 50 ft.

Ouachita Parish

American Liberty Oil Co.'s No. 1 Golson, C NW Sec. 25-17-1e.
Drlg. 3,875 ft.
Ark.-La. Gas Co.'s No. 9 McEnery, 1,319 ft. N, 660 ft. E, SW cor. Sec. 21-19-4e.
Set 7-in. 2,142 ft.
Carbon Consolidated's No. 1 Mabnet & Piper, 1,672 ft. W, 396 ft. S, NE cor. Sec. 1-18-3e.
Moving in rig.
J. E. Farrell & Co.'s No. 5 State of La., 1,693 ft. E, 125 ft. N, N¼ cor. Sec. 31 in Sec. 49-20-4e.
Rigging up.
Maury Drlg. Co.'s No. 7 McEwen, 660 ft. N, 10 ft. E, C Sec. 29-19-4e.
Set 12-in. 174 ft.; set 6-in. 2,146 ft.

Natchitoches Parish

Clyde Crichton's No. 1 Friedman Est., 466 ft. N, 428 ft. E, SW cor. Sec. 52-7-6.
Arranging run Schlumberger 3,540 ft.
Ab Jones' No. 1 Brown Lbr. Co., 400 ft. N, 330 ft. W, SE cor. Sec. 5-10-10.
S.D. 1,033 ft.
B. E. Taylor's No. 1 DeBlieux, 1,395 ft. E, 150 ft. S, NW cor. Sec. 83-10-7.
S.D. 350 ft.

Red River Parish

J. S. Tuffree's No. 1 Wilkinson, 1,320 ft. S and W, NE cor. Sec. 11-12-11.
S.D. 1,395 ft.

Sabine Parish

B. S. & M. Oil Co.'s No. 1 Tatum, 330 ft. S and E, NW cor. NW SE Sec. 32-8-13.
Set 12-in. 100 ft.
G. H. Collins' No. 1-C Cranford, 330 ft. S and E, NW cor. SW NW Sec. 28-9-13.
Tested S.W. 2,077 ft.
Hill Myers' No. 1 Magness, Sec. 30-9-13.
Set 10-in. 45 ft.
M. T. Hines' No. 1 J. B. Hill, SW NE Sec. 4-6-11.
Tested S.W. 3,012 ft.; S.D.; W.O.
Jack Lent's No. 1 Williams, Sec. 13-7-11.
S.D. 1,820 ft.

Union Parish

Carbons Consolidated's No. 2 Feazel, 330 ft. S, 660 ft. E, C Sec. 8-20-3e.
S.D. 2,000 ft.
Southern Prod. Co.'s No. 1 Clark, 500 ft. N and W, SE cor. NW NW Sec. 17-23-1e.
S.D. 2,396 ft.
United Carbon Co.'s No. 1 Schwab, 1,320 ft. S and 660 ft. E, NW cor. Sec. 7-20-4e.
Comp. 7,000,000 ft. gas 2,142 ft.

Webster Parish

Bennett & Eldred's No. 1 Fulbright, NE NE Sec. 1-18-10.
Rigging up.

Winn Parish

Parsons et al's No. 1 Tremont Lbr. Co., 660 ft. S, 330 ft. E, NW cor. SW Sec. 10-12-2w.
S.D. 163 ft.

ARKANSAS

Arkansas County

Grand Prairie Realty Co.'s No. 2 Fischer, 412 ft. S, 12 ft. W, NE cor. NW NW Sec. 6-6-4w.
W.O. csg. 118 ft.

Ashley County

Glenn E. McFaddin et al's No. 1 Boreing Farms, 660 ft. S and W, NE cor. Sec. 1-18-8.
S.D. 2,800 ft.
Texas-Seaboard Oil Co.'s No. 1 fee, C NW NE Sec. 28-17-4.
Drlg. 2,276 ft.

Calhoun County

Hunter Co.'s No. 1 Stout Lbr. Co., 2,077 ft. S, 150 ft. E NW cor. NE Sec. 33-16-13.
Set 12½-in. 254 ft.; drlg. 1,900 ft.

Columbia County

J. G. Cubage et al's No. 1 Rhea, 150 ft. N line, 330 ft. E, SW cor. SE SE Sec. 12-17-22.
Drlg. 3,396 ft.
Southern States Gas Co.'s No. 1 Piney Woods Lbr. Co., 330 ft. N and E, SW cor. NE NW Sec. 10-20-22.
S.D. 960 ft.

Hempstead County

A. H. Bagnelle's No. 1 Trattner & Rhinehart, Sec. 2-13-26.
S.D. 1,992 ft.
F. W. Martin's No. 2 Lafferty, C NW Sec. 17-14-24.
Rigging up.

LaFayette County

Earl F. Fox' No. 2 Coleman Bros., NE NE Sec. 30-16-24.
Rigging up.
Kamon & Neely's No. 1 Cockran, NW cor. SE SW Sec. 26-19-25.
S.D. 4,450 ft.
Transportation Petroleum Co.'s No. 1 Cockran, 300 ft. S and W, NE cor. SE Sec. 26-19-25.
Drlg. 1,350 ft.

Miller County

E. J. Donohue's No. 2 E. L. Beck, 620 ft. S and E, NW cor. SW NE Sec. 33-15-26.
Set 10-in. 146 ft.

M. D. K. Fitzwater's No. 1 E. H. Beck, 150 ft. N and E, SW cor. NW SW Sec. 34-15-26.
W.O.S.R. 2,919 ft.

King Oil Corp.'s No. 1 C. H. Schroder, 200 ft. N, 330 ft. E, SW cor. SW NE Sec. 24-14-28.
S.D. 3,167 ft.

King Oil Corp.'s No. 1 Anderson, 350 ft. E, 200 ft. S, NE cor. SW NE Sec. 16-14-27.
S.D. 2,573 ft.

Frank Roe et al's No. 1 Frost Est., 150 ft. N and W, SE cor. SE SW Sec. 8-15-26.
Set 10-in. 120 ft.

Snowden & Hill's No. 1 E. H. Beck, 255 ft. E and 330 ft. S, NW cor. SW SW Sec. 34-15-26.
Set 7-in. 2,913 ft.; T.D. 2,916 ft.

Nevada County

Carnett et al's No. 1 Floyd Munin, C SW Sec. 16-14-22.
S.D. 50 ft.

Ouachita County

McCullough-Brown, Tr.'s No. 1 Rowe, Sec. 2-12-19.
S.D. 2,006 ft.

Snow-Black Pet. Co.'s No. 1 Bedford, 680 ft. N and 150 ft. E, SW cor. Sec. 32-11-18.
Set 8-in. 1,000 ft.; T.D. 1,003 ft.

Poinsett County

Rockwell Development Co.'s No. 1 W. A. Smith, NE NE Sec. 13-11n-3e.
Drlg. 1,116 ft.

Union County

Gardy Drlg. Co.'s No. 1 Craig, Sec. 35-17-15.
Testing 3,211 ft.

Gulf Ref. Co.'s No. 49 L. Werner, 4,620 ft. N, 60 ft. E, SW cor. Sec. 5-16-16.
Dry and abnd. 7,973 ft.

H. L. Hunt's No. 15 E. F. Gregory, 330 ft. N and W, SE cor. Sec. 10-17-14.
T.A. 3,478 ft.

H. L. Hunt's No. 18 E. F. Gregory, 330 ft. N and E, SW cor. Sec. 11-17-14.
Abnd.; will not drill.

Mrs. R. K. Jones et al's No. 1 Davis, 330 ft. N and W, SE cor. NW NW Sec. 28-16-14.
Arranging to test 3,297 ft.

Marine Oil Co.'s No. 3 M. H. Simmons, Sec. 10-18-13.
Set 10-in. 154 ft.; drlg. 900 ft.

C. E. Murdock's No. 1 Pumphrey, C SW NW NE Sec. 11-17-14.
Derrick.

F. F. Roberts et al's No. 1 Galion Lbr. Co., 330 ft. S and E, NW cor. NW SE Sec. 10-16-14.
Set 10-in. 104 ft.

MISSISSIPPI

Amite County

Mineral Resources, Inc.'s No. 1 Anderson, C NE NW Sec. 14-3n-3e
S.D. 550 ft.; taking new leases.

Bolivar County

White & Jones' No. 1 Ballou, SE SE NW Sec. 17-24n-7w.
Drlg. 1,270 ft.

Clarke County

L. Beckwith et al's No. 1 Long Bell Lbr. Co., 528 ft. S, 125 ft. W of C Sec. 10-2n-16e.
T.A.; lack of funds.

Clarke County Oil Co.'s No. 1 Dora Butler, C SW SW Sec. 15-2n-16e.
Set 10-in. 63 ft.

Harrison County

Big Ridge Oil Co.'s No. 1 Hinzin, NE Sec. 13-7s-10w.
S.D.; W.O. 1,100 ft.

Hinds County

Weaver & Alexander's No. 2 Walthall, Sec. 25-6n-1e.
Drlg. plug. 2,441 ft.

Lauderdale County

Bob Dalton's No. 1 Bounds, Sec. 34-7n-15e.
S.D.; W.O. 1,600 ft.

Monroe County

P. J. McAlpine's No. 1 Frank Rye, Sec. 15-15s-17w.
S.D.; W.O. 2,537 ft.; (corrected).

P. J. McAlpine's No. 1 Crook, 1,090 ft. S, 90 ft. W, NE cor. Sec. 15-13s-13w.
Arranging set 6-in. 3,502 ft.

Simpson County

Berry Corp.'s No. 2 R. T. Berry, Sec. 33-2n-4e.
T.A. 2,510 ft.

Warren County

H. W. Elliott et al's No. 2 R. L. Parker, 780 ft. E, 1,570 ft. S, NW cor. Sec. 14-14n-1e.
S.D.; high wtr. 1,600 ft.

Washington County

Perkins & Dees' No. 1 Lee, 1,500 ft. E, 500 ft. N, SW cor. Sec. 33-15n-3w.
S.D. 2,175 ft.

Winston County

Jack Vale et al's No. 1 Moody, 713 ft. N, 667 ft. E, SW cor. NW SW Sec. 3-13n-14e.
S.D. 2,350 ft.

ALABAMA

Covington County

Geometer Prod. Corp.'s No. 1 Culbreath, SW cor. SW NE Sec. 8-3n-14e.
S.D. 6,300 ft.

Houston County

Rice O. & G. Co.'s No. 1 Oakley est., SE cor. NW SW Sec. 9-3n-29e.
S.D. 2,776 ft.

Lamar County

DeSoto O. & G. Corp.'s No. 1 Gardner, Sec. 22-15s-16w.
Drlg. 4,540 ft.

FLORIDA

Lake County

Oil Dev. Co. of Florida's No. 1 South Lake, SE SE Sec. 17-24s-25e.
S.D. at 1,946 ft. after coring 75 ft. of lime; awaiting acid treatment.

LA.-ARK. PROVEN
NORTH LOUISIANA

Caddo—Rodessa

Haynes Prod. Co.'s No. 1 W. B. Lawton, 1,980 ft. N and E, SW cor. Sec. 14-23-16.
Drlg. 4,420 ft.

Haynes Prod. Co.'s No. 1 Harry Otwell, 660 ft. N, 660 ft. W, SE cor. Sec. 15-23-16.
Set 9⅝-in. 2,102 ft.; drlg. 2,740 ft.

Haynes Bros. Drlg. Co.'s No. 1 Tyson, 660 ft. S and E of C Sec. 24-23-16.
Set 7-in. 5,460 ft.; drlg. 5,485 ft.

Ark-La Gas Co.'s No. 1 J. S. Teamer, 330 ft. N and 660 ft. W, SE cor. SW SE Sec. 13-23-16.
Drlg. 3,806 ft.

R. W. Norton's No. 1 Caddo Levee Board, 660 ft. N and W, SE cor. NE Sec. 21-23-16.
Drlg. 3,020 ft.

O'Brien Brothers' No. 1 Rodessa Oil & Land Co., 660 ft. S and 330 ft. E, NW cor. SW Sec. 14-23-16.
Drlg. 3,513 ft.

Pelican Oil & Gasoline Co.'s No. 1 Sexton, 660 ft. S and W, NE cor. SE Sec. 14-23-16.
Drlg. 4,250 ft.

D. C. Richardson's No. 1 Caddo School Board, C S line NE SW Sec. 23-23-16.
Derrick.

United Gas Public Service Co.'s No. 1 W. M. Bremer, 1,980 ft. N and 660 ft. E, SW cor. Sec. 22-23-16.
Drlg. 3,540 ft.

United Gas Public Service Co.'s No. 1 Gibson Est., 660 ft. N, 1,980 ft. W, SE cor. Sec. 15-23-16.
Drlg. 630 ft.

United Gas Public Service Co.'s No. 1 Rodessa Oil & Land Co., 1,980 ft. N and 660 ft. W, SE cor. Sec. 15-23-15.
Set 13⅜-in. 725 ft.; drlg. 1,600 ft.

United Gas Pub. Ser. Co.'s No. 1 Thomas Unit, 634 ft. S, 1,962 ft. E, NW cor. Sec. 23-23-16.
Drlg. 4,022 ft.

Sabine Parish—Zwolle

Alexander & Crane's No. 1 Fogman, SE cor. N½ SW NE Sec. 18-7-11.
S.D. 2,655 ft.

Ivan A. Allen's No. 1 La. Long Leaf, 330 ft. N and W, SE cor. NW SE Sec. 12-7-11.
S.D. 2,670 ft.

H. C. Mauilding's No. 1 Davis, 350 ft. N and W, SE cor. NE NE Sec. 2-7-11.
S.D. 400 ft.

K. C. Peterson et al's No. 1 Bowman-Hicks, 330 ft. S and E, NW cor. SW NW Sec. 2-7-9.
Location.

Texas Co.'s No. 8 E. Stille, 330 ft. S, 340 ft. E, NW cor. NE Sec. 3-7-11.
Drlg. 2,390 ft.

Tex.-La.-Ark. Oil Co.'s No. 1 Pickering Lbr. Co., Sec. 3-8-12.
S.D. 2,742 ft.

EAST TEXAS
(Border Counties)

Harrison County

R. C. Payne et al's No. 1 Lowery, H. D. Spain Sur.
P.B. to 3,524 ft.

Marion County

Ed S. Holman's No. 1 Henderson, R. Bennington Sur.
P.B. to 2,443 ft.

Panola County

R. A. Graddy's No. 1 M. J. McCormick, J. McAdams Sur.
Moving in rig.

George Hudson et al's No. 1 J. F. Nail, C. McGeary Sur.
Set 8-in. 40 ft.; fishing for core bbl. at 2,345 ft.

Geo. Le Grand's No. 1 P. J. Wardleigh, A. Thompson Sur.
Set 10-in. 62 ft.

R. W. Price's No. 1 Crawford, J. A. Williams Sur.
Set 10-in. 64 ft.

Fred Stovall Drlg. Co.'s No. 1 H. D. Ivey, P. Martin H.R.S.
S.D. for csg. 1,980 ft.

Shelby County

Cliff Stoval's No. 1 Pickering Lbr. Co., C. H. Patterson Sur.
S.D.; rig repair. 1,485 ft.

E. C. TEXAS WILDCATS
Week Ending August 17

Camp Hill Area

Gulf Prod. Co.'s No. 2-A Southern Lbr. Co., 330 ft. W along N line of 115.9-ac.

WHIPPING
is a symptom

● The drilling line that whips excessively at high speeds also plays other undesirable pranks. It doesn't return the idle block in fast time. It doesn't spool properly under light load. It piles up on the drum and crushes itself. It twists in the sheaves and wears itself prematurely. It kinks at every opportunity.

All those undesirable qualities are due to *non*-preforming.

That is why you should insist on using only LAY-SET Preformed Rotary Lines. LAY-SET is willing to work at high speeds, regardless of load. Every strand carries its full share of the load with the result that it resists twisting in the sheaves, spools perfectly on the drum, and resists kinking.

LAY-SET Preformed Rotary Lines give you more and faster round trips. LAY-SET Preformed saves the driller's time; saves the equipment. And LAY-SET "Green Strand" (made of Improved Plow Steel) is supreme.

HAZARD WIRE ROPE COMPANY, Inc.
Wilkes-Barre, Pennsylvania
An Associate Company of American Chain Company, Inc.
In Business for Your Safety
District Offices: New York, Chicago, Philadelphia, Fort Worth, San Francisco, Pittsburgh, Denver, Los Angeles, Birmingham, Tacoma

William M. Barret, Inc.
Consulting Geophysicists
Specializing in Magnetic Surveys
Contracts accepted for domestic and foreign projects, using the most improved instrumental and interpretative technique.
GIDDENS-LANE BUILDING -:- SHREVEPORT, LA.

tract from SE cor. of L. B. Ross' 37.6-ac. tract, and 330 ft. S at R/A, south offset to No. 1 Ross.
Elev. 598 ft.; T.D. 5,236 ft.; swabbing 80 bbls. per day; to put on pump.

Cayuga Area—Anderson County

Tide Water Oil Co. et al's No. 21-A Wells. 4,079 ft. N and 2,323 ft. W of lease, S. Edmondson Sur. (Trinity test).
T.D. 8,897 ft.; pulling tubing to deepen.

Long Lake Area—Anderson County

Tide Water and Texas Seaboard Oil Co.'s No. 3 Goode, 2,500 ft. from most northerly N line and 2,200 ft. from most easterly E line of F. Smith Sur.
Derrick.

Tide Water and Texas Seaboard Oil Co.'s No. 1 H. B. Keeling, 1,408 ft. from S line and 126 ft. from E line, Simon Sanches Sur., one-half mile E of Tucker.
Drlg. 225 ft.

Angelina County

Burnham et al's No. 1 Norton Properties. 700 ft. NW cor. and 600 ft. from E of W. M. Johnson Sur., 8 miles SW of Zavala in SE part of county.
S.D. 40 ft.

Howse Oil Co.'s No. 1-C Finley, 150 ft. out of NW cor. of 85-ac. tract, 7 miles NE of Lufkin, Bluford Mitchell Sur.
Spudded.

Hunter Co., Inc.'s No. 3 Long Bell Lbr. Co., 350 ft. from N and W lines in J. Fulcher Sur., 5 or 6 miles SE of Huntington.
Derrick and rotary tools.

Bowie County

Tex-Ark. Oil Co.'s No. 1 Hamilton Estate, 600 ft. E and 350 ft. N lines, J. Milan Sur., 4 miles S of Red River.
Washing to bottom.

Woodley & Bentley's No. 1 Lumpkin, 330 ft. out of NE cor. of 245-ac. tract, J. McDermot Sur., 1 mile SW of Dalby Springs.
S.D. 120 ft.

Cherokee County

Shell Pet. Corp.'s No. 1 New Birmingham Dev. Co., 190 ft. S and 150 ft. E from SE cor. T. J. Wood 160-ac. lease Levi Jordan Sur.
Top sand 5,289 ft.; fishing 5,292 ft.

Wilson Stubbs Oil Co.'s No. 1 Rowborta, 450 ft. from S line, 150 ft. from W line of 160-ac. tract, 2 miles SW of Jacksonville, J. D. Wolfin Sur.
S.D. 1,553 ft.

Falls County

Bell & Hays' No. 1 Taylor, 155 ft. from N and 465 ft. from E of 20-ac. tract, J. A. Manchaca Sur., Chilton area.
To spud.

Fannin County

B. F. Allen's No. 1-B Argo, center of 16½-ac. tract in J. G. Swisher Sur., 1 mile S of Ector.
S.D. 405 ft.

Warner Moore et al's No. 1 Hancock. 400 ft. from W and 150 ft. N lines, Sec. 16, L. M. Baldock Sur., ½ mile S of Trenton.
T.D. 652 ft.; reaming to set csg.

Freestone County

J. E. Milburn's No. 1 S. E. McShan, 4,000 ft. NW and 5,000 ft. NE of tract, 3 miles SE of Donie, G. Diaz Sur.
S.D. 270 ft.

Stewart & Watson's No. 1 S. A. Burleson (Ball), 466 ft. from E and W at right angles from NE cor. of A. Wade 75 (63.6) acre tract.
Location.

Gregg County

O. T. Clark's No. 1 Williams, 2,100 ft. from S and 2,400 ft. from W of D. Hill Sur., 3 miles NE of Longview.
S.D. 3,710 ft.

L. F. Kean's No. 1 S. M. Smith, 1,000 ft. E and 1,250 ft. S of W. W. Avery Sur., 4 miles SE of Gladewater.
T.D. 1,651 ft.; to move in heavy rig.

Henderson County

Kirby Pet. Co.'s No. 1 C. L. Litchfield, 600 ft. N and 350 ft. W, I. Clendennen Sur.
Location.

Roeser & Pendleton's No. 1 Litchfield, 215 ft. from S and 467 ft. from W, T. J. Lindsey Sur.
Location.

Taubert & McKee's No. 2 M.T. Todd, 2,750 ft. from NE and 2,970 ft. from SE lines of Sur., Geo. Aldrich Sur., 2 miles SE of Malakoff.
Elev. 359 ft.; S.D. 4,345 ft.; salt wtr. sand; T.S. 4,330 ft.

J. K. Wells' No. 1 W. E. Warren, 330 ft. out of NE cor. of Thos. Hanna Sur., 4 miles W of LaRue.
Pecan 2,800-2,925 ft.; top Austin 3,825 ft.; drlg. 4,600 ft.

H. M. Wilson's No. 1 fee, 970 varas S of NE cor. of 943-ac. tract, 5 miles N of Malakoff.
Derrick.

Hopkins County

D. A. Hale et al's No. 1 L. M. Hall, 200 ft. from N and E lines of 70-ac. tract, 1 mile SE of Miller Bros. A. Caro Sur.
S.D. 3,960 ft.

Hunt County

Long & Wolfe et al's No. 1 A. L. Chapman, 376 varas from N and 2,669 ft. from W line of Enos Murphy Sur., 4 miles W of Greenville.
Drlg. 2,123 ft.

J. F. Morrissey & Co., Inc.'s No. 1 Fry, 543 ft. from N and 290 ft. from E of 146-ac. tract, 7 miles N of Commerce, C. Davis Sur.
Coring 3,800 ft.

Kaufman County

Germany et al's No. 1 Clark, 951 ft. N and 1,000 ft. W of tract, S. Eden Sur.
T.D. 1,780 ft.

Murry & Emerson's No. 1 G. W. Martin, 1,660 ft. from W and 250 ft. from N of 140-ac. tract, from W. L. C. Butler Sur., 2 miles NE of Kemp.
S.D. 1,784 ft.

Lamar County

Gulf Petroleum Co.'s No. 1 A. L. Darnell, 1,490 varas from S and 1,080 varas from W line of H. L. Williams Sur., 4 miles NE of Paris.
Drlg. 1,378 ft.

Leon County

Killough & Tucker's No. 1 G. W. Lee, center of NE 10 acres of 230-ac. tract, J. Burleson Sur.
T.D. 5,641 ft.; P.B. to 5,600 ft.; made drill stem test; showed 3,700 ft. mud.

Tide Water Oil Co. et al's No. 1 G. W. Burkett, 1,435 feet from SE and SW lines of S. Sanches Sur. No. 7.
Coring 5,200 ft.

Limestone County

J. Edward Mills' No. 1 Hunt, 200 ft. from N. 250 ft. from W line 34.75-ac. tract, Israel Wood Sur., 3 miles NE of Kosse.
S.D. 3,802 ft.

Doughtry et al's No. 1 S. Welch, 150 ft. from NW and 900 ft. from NE of 77.64-acre tract in A. Varilia Sur., 4 miles W of Groesbeck.
S.D. 3,121 ft.; acidized; testing.

McLennan County

T. Cunningham's No. 1 M. G. McKee, 940 ft. from S and 2,640 ft. W of 640-ac. tract, M. Snell Survey, near Bruceville.
Location.

Nacogdoches County

Rosser Bros. & Jackson's No. 1 Mattby, 330 ft. out of NE cor. 60-ac. tract, Pedro J. Esparza Sur., 5 miles S of Nacogdoches.
Location.

Navarro County

McCullough et al's No. 1 C. Berry, 330 ft. from SE cor. of 35-ac. tract, 1 mile W of Dawson, William Moss Sur.
Coring 1,500 ft.

Wiggins et al's No. 1 Donoho, 450 ft. from N and 1,101 ft. from E lines in John Couple Sur., SW of Corsicana.
S.D. 1,429 ft.

Rains County

Allen & McClung's No. 1 Giles, T. Cunningham Sur., Abst. 143, 330 ft. from W line and 200 ft. from N line of 105-ac. Giles tract, 5 mi. SW of Emory.
Derrick.

Allen & McClung's No. 1 Ida Bullard, N. Brantely Sur., 1,300 ft. from W line and 200 ft. from N line of 25-ac. tract, 2 mi. SW of Emory.
Derrick.

Allen & McClung & Collard's No. 1 S. P. Cain, 1,350 ft. N and 1,500 ft. W line of J. Harges Sur., 1 mile NW of Emory.
Location.

Red River County

Abercrombie et al's No. 2 Grant, 1,100 ft. N and 6,140 ft. W of P. D. Midkiff Sur., 8 miles NW of Clarksville.
Drlg. 1,032 ft.

R. H. Chew et al's No. 1 J. F. Brooks, 990 ft. N and 600 ft. of W line of 320-ac. tract, B. Gooch Sur., ½ mile S of Bagwell.
Derrick.

Joiner's No. 1 D. Rust, C. C. Wilborn Sur., 234 ft. N and 254 ft. W of most southerly SE cor. of Sur., just south of Avery.
Derrick.

Rusk County

J. W. Shipman et al's No. 1 Citizens Natl. Bank, NE cor. of 125-ac. tract, J. J. Y'Barbo Sur., 4 miles NE of Henderson.
Elev. 432 ft.; S.D. 1,550 ft.

Smith County

W. R. Harrison's No. 1 Rushing, J. Herring Sur. (O.W.D.D.)
S.D. 4,330 ft.

Titus County

S. Rotondi's No. 1 Lillianstun, 1,200 ft. E from NW cor. of J. Bodt Sur. and 330 ft. N, but in W. H. Crawford Sur., 5 miles NE of Talco.
Elev. 301 ft.; derrick.

Van Zandt County

J. Beren et al's No. 1 Bryant, 483 ft. N of same operator's dry hole, Nacogdoches County School Land Sur.
S.D. 1,325 ft.

Beren et al's No. 2 Palmer, 544 ft. from S and 686 ft. from E of 69.5-ac. tract, Nacogdoches County School Land.
S.D. 1,302 ft.

Wood County

Hollandsworth Drlg. Co.'s No. 1 Little Sandy Hunting & Fishing Club, 400 ft. from N and 3,500 ft. E of James Hamblin Sur., 12 miles SE of Mineola.
Base Austin 4,755 ft.; S.D. 5,084 ft.

S. W. TEXAS WILDCATS

Week Ending August 17

Atascosa County

Robert McIntyre's No. 1 Billimels, 1,104 ft. SW line, 3,700 ft. SE line, J. D. Woodruff Sur. No. 246.
Location.

Don Wegahan's No. 2 Dauna Farms Co., 15,000 ft. W line, 8,200 ft. S line, Barbara Sanchez Sur.
Location.

Bandera County

Milam Drlg. Co.'s (Plateau Oil Co.) No. 1 Garrison, G.C.&S.F. Sur. No. 506, 1,500 ft. from W and 2,970 ft. from N lines of survey.
Running 7-in. csg. 3,410 ft.

Palm Winn Oil Co.'s No. 1 Watson, 600 ft. N of center line, Sur. 71 (workover).
S.D. 1,750 ft.; T.D.

Bastrop County

Joe Mills et al's No. 1 American National Bank of Austin, R. Gage Sur., 150 ft. NE line, 2,300 ft. SE line of survey.
Set. 10-in. sur. csg. 21 ft.; drlg. 155 ft.

Bee County

G. M. Church's No. 1 J. C. Woods, 330 ft. from N line, 330 ft. W of road, J. Ryan Sur., H.&G.N.R.R., Abstract 186.
Coring 5,817 ft.

Grisham et al's No. 1 Ansberger, 330 ft. of S and W lines of 185-ac. tract, Sec. 1.
Coring 4,123 ft.

Henderson Coquat et al's No. 1 Baily; ½ mile W Mineral.
Drlg. 3,863 ft.; tested salt wtr. in Pettus sand; drlg. to Yegua.

F. P. Hynes' No. 1 Plummer, 990 ft. S line, 330 ft. W line, Sec. 33, F. J. Chessman Sur.
Drlg. 2,811 ft.

F. P. Hynes' No. 2 Plummer, F. J. Chessman Sur. 1, 40 ft. W of No. 1.
No report.

D. V. Smith et al's No. 1 Atkins, M. M. Wood Sur.
Rigging up; standing.

Bexar County

Cherokee Drlg. Co.'s No. 1 Chapman, 2,100 ft. from S line, 3,200 ft. from E line, A. J. Leslie Sur.
S.D. 400 ft.

Fay Chew's No. 1 Jones, 1,650 ft. E line, 150 ft. N line, A. Thompson 50-ac. tract, Jacinto Pena Sur. No. 9.
Standing; sandy shale; T.D. 720 ft.

Fay Chew's No. 2 Jones, 1,025 ft. E line, 150 ft. N line, A. Thompson 50-ac. tract, Jacinto Pena Sur. No. 9.
T.D. 469 ft.; S.D.

Fay Chew's No. 5 Jones, Sec. 9, Pena Sur., 1½ miles E of Adkins.
No report.

Jas. B. Cunningham's No. 1 L. F. Ridder, 950 ft. S of Nelson Road, 1,300 ft. from E line, Block 5,196, Sur. No. 58.
T.D. 520 ft.; standing.

Derine Oil Co.'s No. 2 Indyk, 600 ft. E line, 400 ft. S line, Blk. 4.
Show oil 605 ft.

Dunham & McClure's No. 1 S. A. Sewer Pipe Co., 600 ft. S line, 330 ft. W line, 53-ac. tract, E. Brown Sur.
Drlg. 1,966 ft.

C. J. LeComte's No. 1 Herbst, 150 ft. out of SW cor. of Manuel Leal Sur.
Rigging up to deepen, 360 ft.

McPhee & Briggs' No. 1 F. Lamb, 9,200 ft. from S line, 800 ft. from W line of Sur. No. 2 (Manuel de Luna).
T.D. 2,337 ft.; set csg. 2,366 ft.; drlg. plug.

Mid-Texas Prod. Co.'s No. 1 C. G. Walker, 330 ft. out of NE cor. Lot 21, S. M. Doble Sur. No. 79; drlg. Glen Rose lime 10-in. csg. set at 1,180 ft.; T.D.; show gas 1,240-52 ft.; will ream to 1,340 ft.; carry 10-in. csg.

Morgan & Magna's No. 1 Kirkwood, Desaque Sur., 9 miles SW of San Antonio.
Location.

Carroll C. Raborn's No. 1 Claude McCauley, 150 ft. from N and NW lines of tract in Sec. 52, Wm. Harrison Sur.
S.D. 950 ft.

C. C. Raborn's No. 1 Palfrey, 2,000 ft. W of Salado Creek, 2,500 ft. from S line, Alamiz League.
Location.

C. C. Raborn's No. 1 A. B. Stephens, 1,630 ft. from N line, 1,540 ft. from W line of tract, P. B. Hayes Sur. No. 3.
S.D. 415 ft.

Richards Oil Co.'s No. 1 Russell, 1,000 ft. E line, 140 ft. S line Rodriguez Sur.
Drlg. 1,371 ft. in lime.

Blanco County

H. R. Roe and W. E. Nixon's No. 1 Polk Morrisey, 2,000 ft. from W line, 1,000 ft. out of SE cor., 1,600 ft. from N line of Thomas H. Webb Sur. No. 91.
T.D. 370 ft.; S.D.

M. O. Roger's (Detroit-Texas Dev. Co.) No. 3 Dunlap, 300 ft. SE line, 1,300 ft. NE line Dunlap 105-ac. tract, Stephen F. Sanches Sur.
Show oil 2,129-80 ft.; T.D. 2,190 ft.

Caldwell County

O. W. Killam's No. 1 Moore, 1,566 vrs. SW line, 775 vrs. SE line, Joseph Burleson, Sr. Sur.
T.D. 2,129 ft. chalk; dry and abnd.

Cameron County

Joseph Anderson's No. 1 Browne, Blk. 279, 3 miles N Rio Hondo.
Spudded in.

Dewitt County

Reginald F. Baurke's No. 1 W. C. Steinman Est., 937 ft. from N and S lines, Uriah Blue 1-3 League.
T.D. 115 ft.; S.D.

J. C. Crossman's No. 1 Kleberg, 2 miles NW Cuerro (old test).
T.D. 80 ft.; S.D.

D. G. Glaspier's No. 1 Schusbel, 330 ft. from S and W lines of tract, Fitzgerald grant.
Spudded in; S.D.

Dimmitt County

Diamond Half Oil Co.'s No. 1 Eardley Est., 2,310 ft. SW line, 330 ft. NW line, E. A. McCorquodale Sur. No. 6.
Location; drlg. wtr. well.

Joe Lundin's No. 1 Nueces Sand, 330 ft. NE line, cor. Lot 16, Blk. 7.
Location.

Duval County

Atkins & O'Neill's No. 1 Clara Driscoll Sevier, 2,640 ft. from N, E and W lines of Sec. 7, T.&N.O. R.R. Co. Sur.
Spudded.

J. H. Chandler's No. 1 Rita Pena, 1,325 ft. of NW line, 3,325 ft. of SW line, Share 4, Mesquite grant.
Drlg. 2,357 ft.

Magnolia Pet. Co.'s No. 1 D.C.R.C., 330 ft. from S & E lines of Sur. 100.
T.D. 2,135 ft.; P.B. to 1,956 ft.

Marzo Oil Co.'s No. 1 E. R. Hagist, 150 ft. from E line, 330 ft. from N line, Sec. 269, Blk. 8, Beaty, Seale & Forward Sur.
No report.

Santa Clara Oil Co.'s No. 1 Sevier, C Blk. 70, T.&N.O. Sur.
Drlg. 1,135 ft.

Fayette County

Ross Fenton's No. 1 Kasper (263-ac.), 3,000 ft. from NE line, 1,280 ft. from SW line, of Thos. Green Sur. No. 28.
S.D.

Frio County

Amerada Pet. Corp.'s No. 1 Smith, 4,552 ft. NE line, 1,550 ft. SE line, J. V. Mason Sur.
T.D. 6,238 ft.; P.B. to chalk; perforated 5,920-27 ft.; comp. est. 60 bbls.

W. D. Bacon's No. 1 Burns, 2,500 ft. S and W line, Thomas Clifton Sur.
Moving in material.

Goliad County

Hendricks et al's No. 1 Gillette, 330 ft. of NW and SW lines of tract, G. Gomez Sur.
Location.

Keystone Royalty Co.'s No. 1 M. Woods, SW part of county, 15,000 ft. from SW line, 5,000 ft. from NW line of J. Sherman Sur.
T.D. 5,960 ft.; fishing for core barrel.

Sun Oil Co.'s No. 1 Scarborough, 1,320 ft. SE No. 3, Sec. 25, Talley & B.B. Sur.
Drlg. 3,012 ft.

Gonzales County

Amerada Pet. Co.'s No. 1 Union Central Life, 800 ft. of SW line, 330 ft. of SE line, 122-ac. tract, Hendricks Sur.
T.D. 3,512 ft.; dry and abnd.

S. W. Forrester Oil Co., Inc.'s No. 1 Stein, 475 ft. of SW line, 1,033 ft. of SE line, 211-ac. tract, Bane Sur.
Ready to spud.

Resource Prod. Co.'s No. 1 Lanbeck, 700 ft. from NW line, 1,919 ft. from SW line, J. M. Salinas Sur.
Loc. abnd.

Guadalupe County

J. E. Clark's (H. H. Weinert) No. 1 Lay, 800 ft. along road from SW cor., then 150 ft., J. K. Davis Sur.
Comp.; pumped 218 bbls. in 24 hrs.; 33.3 gravity black oil; T.D. 2,441 ft.

Grace et al's No. 1 Ogletree, 400 ft. SE line, 1,600 ft. SW line, 404-ac. tract, Robert Smith Sur. No. 15.
Redrig. old well; R.U.; S.D.

Bob Gode et al's No. 1 Hicks, 1,320 ft. from E line, 150 ft. from S line of 189-ac. tract in Santo Y. Coy Sur.
T.D. 800 ft.; lime; S.D.

J. Harper's No. 1 Flucher, 220 ft. NE line (Creek), 150 ft. NW line tract, Robert Smith Sur. No. 15.
Drlg. 10-in. csg. 33 ft.

Inter-Allied Pet. Co.'s No. 1 Wells, 1,705 ft. NE line, 175 ft. SW line, Sec. 3, 80-ac. tract, Sur. 3.
Location.

Mineral Oil Corp. of Texas' No. 1 Allen Phillips, 162 ft. from N line, 900 ft. from E line of tract, Cortinos Sur.
T.D. 888 ft.; abnd.

W. T. Scrutchin's No. 1 A. H. Smith, 150 ft. from E line, 1,350 ft. from N line of 24.5-ac. tract, Jas. B. Cowan Sur.
Standing; T.D. 825 ft.

J. S. Suttle's No. 2 Baenziger, S of Seguin.
Washing to bottom; T.D. 1,500 ft.;

Suttle et al's No. 1 Baenziger, 700 ft. from S line, 500 ft. from E line of 125-ac. tract, Monsoia Sur.
T.D. 2,156 ft.; whipstocked at 1,310 ft.; drlg. at 1,507 ft. in sidetracked hole.

Hidalgo County

Bluff Pet. Co.'s No. 1 Porcion Land Co., 330 ft. from N and E lines of NE 100 acres of S 500 acres of Share 14, Por. 49.
T.D. 1,328 ft.; dry and abnd.

Downey & Morton's No. 1 Daskom, 450 ft. from E line, 55 ft. from S line of Blk. 34, Por. 45.
Swabbing; show oil.

E. H. East's No. 1 Scarbrough, 150 ft. from S line, 1,150 ft. from E line of Blk. 14, East Retema Subd., Tule Grant.
T.D. 1,227 ft.; S.D.

Maddox & Walter's No. 1 John H. Shary, 305 ft. from SE line, 440 ft. from SW line of Blk. 21, Porcion 58.
Drlg. 5,972 ft.

Madox Turnbull & Irwin's No. 1 J. H. Shary, 320 ft. N and E lines of Tract 21, Porcion 59.
T.D. 6,101 ft.; abnd.

Mundy & Son's No. 1 Guerra, 858 ft. from W line, 1,375 ft. from N line of Tract 13, Porcion 41.
Drlg. 313 ft.

Sloan et al's No. 1 Brock & Showers, 250 ft. S and W lines, Lot 9, Blk. 16, Por. 80. Location.

Jim Hogg County

Macon Pet. Co.'s No. 1 Gomez, 990 ft. S line, 330 ft. W line, Sur. 105. Location.

Miller & Pippin's No. 1 Yeager, 527 ft. S line, 150 ft. E line of Blk. 6, Sur. 20. **Fishing 3,630 ft.**

A. W. Phillips' No. 1 Allen, 660 ft. from S and E lines of Blk. 293, Pippin Subd. of the Randado grant.
T.D. 42 ft.; standing.

G. C. Rankin et al, NW cor. Lot 6, Sec. 5. Rigging up.

Karnes County

Marts Pet. Co.'s (Harris & Jecker) No. 1 Cochran, 150 ft. from S line, 360 ft. from E line, McConnel League.
Drlg. 227 ft.

Marzo Oil Co.'s No. 1 Thane, 330 ft. from S & E lines of W half of N 160-ac. of 320-ac. tract in F. Ruiz Sur.
Coring 2,812 ft.

Harry Sample's No. 1 Seeger, 330 ft. from W line, 330 ft. SW of road, J. Pointevent Sur.
S.D. 3,008 ft.

R. G. Tonkin's No. 2 Henke, 3,670 ft. from SW cor., 330 ft. from W line (location changed). **Location.**

Kendall County

J. C. Freeman's No. 1 J. M. Gerffers, 1,300 ft. out of SW cor. of 119-ac. tract, Mark Hodgson Sur., Sec. 796.
T.D. 102 ft.; S.D.

Southwestern Dev. Co.'s No. 1 Werner, 765 ft. W line, 1,645 ft. N line, J. F. Torrey Sur. No. 781.
Set 8-in. csg. 580 ft.; T.D. 668 ft.; standing.

Kerr County

Eastland Oil Co.'s No. 5-E Love, 1,580 ft. E line, 300 ft. N line, Sur. 1,591.
Set csg. 5,623 ft.; standing.

Emerald Oil Co.'s (Meteor Oil Co.) (Edminton & Walker) No. 1 Whitworth, 1,160 ft. from S line and 1,333 ft. from E line of Sec. 1,439 of the H.E.W.T. Sur.
S.D. in lime 800 ft.

G. F. Schreiner et al's No. 3 Jeff Love, 1,500 ft. SE of No. 1 and 1,530 ft. from SE cor. and 300 ft. from N line of Sec. 1,591.
T.D. 5,625 ft.; porous lime; S.W. 5,622-25 ft.; S.D.

Kleberg County

Harry Clark's No. 1 Rodgers, Lot 5, Blk. 36.
S.D. 750 ft.

Fidelity & Culbertson Exploration Co.'s No. 1 Kivlin, Blk. 39, Lot 4, K.T.&I. Sur.
Sand 2,185-2,213 and 2,505-25 ft.; T.D. 3,027 ft.; P.B. to perforate 2,640-48 ft.; W.O.C.

Fidelity Expl.'s No. 1 Henry, Lot 2, Sec. 49, K.T.&O. Sur.
Drlg. 2,980 ft.

Parr & Ponder's No. 1 Sam Michalk et al, 330 ft. from N line and 775 ft. from S line, Blk. 37, Sec. 5; 5 miles SE Kingsville.
T.D. 2,000 ft.; S.D.

Lee County

McNeill Pet. Co.'s No. 2 Beatty, 650 ft. SW of No. 1.
Rigging up ready to spud.

Scharbach & Stoe's No. 1 Robert Otto.
T.D. 2,450 ft.; dry and abnd.

Live Oak County

Aransas Oil Co.'s No. 1 Reed, 330 ft. E line, 1,320 ft. S line, Spicer Sur. No. 70.
Drlg. 797 ft.

Mills Bennett Prod. Co.'s No. 1 Watson et al, 3,653 ft. NE cor. of L. D. Camp tract, then 990 ft. N line of tract, Pablo Salinas Sur.
Set csg. 2,750 ft.; perforated 4,699-4,705 ft.; tested 300 ft. oil.

E. H. Buchner's No. 1 McNeill, 300 ft. of SW cor. of 40-ac. tract, Blk. 8, McNeill Subd.
Location.

Earl Calloway's No. 1 Lyne, 895 ft. of W line, 330 ft. of N line, SW¼, SW¼ of M. M. Lyne Sur.
Location.

Earl Calloway's No. 1 George West hrs., Sec. 355, B.S.&F. Sur.
Coring 3,187 ft.

Conway & Buescher's No. 1 Sanger, 330 ft. N of center of NW line of Sur. 224 in Sur. 383.
Rigging up.

Henderson Coquat's No. 1 Reagan, McGloin Sur., E of Nueces River and S of Oakville.
Drlg. 2,212 ft.

Lucky Strike Oil Co.'s No. 1 Sails, 150 ft. SE cor., Blk. 114, Scrugham Sur.
Set Surface csg.; W.O.C.

G. A. Pinkley's No. 1 Jacob Corp., NE¼ SE¼ Sec. 3, G.H.&H. Sur.
Spudded in.

Maverick County

Thompson & Sheeter's No. 1 Wipff, 330 ft. W line, 1,800 ft. S line, Sec. 18.
Drlg. 283 ft.

McMullen County

Aransas Oil Co.'s No. 1 Reed, 330 ft. E line, 1,320 ft. S line, Spicer Sur.
Drlg. 937 ft.

L. D. Armsley's No. 4 Griffith, 660 ft. N line, 1,360 ft. E line tract, Osborne Sur. 56.
S.D. 125 ft.

L. D. Armsley's No. 5 Griffith, 330 ft. N line, 1,030 ft. E line, Sur. 50.
Moving in material.

Bussa Oil Co.'s No. 1 F. B. Horton, center of E½ of NW¼ of S 640-ac. of J. M. Jean Sur. No. 29.
S.D. 615 ft.; changing rig.

Carruth & Hagen's No. 1 Lange, 1,900 ft. W line, 330 ft. N line tract, Wm. Haley Sur.
Location.

J. O. Gibson's No. 1 G. C. West (Lowe), 150 ft. E line, 1,200 ft. S of NW cor. of Lot 1, Blk. 4, H.T.&B. Sur.
S.D. 465 ft.

Howard & Carpenter's No. 1 Jungman, 1,030 ft. from E line, 950 ft. from S line, Hely Sur.
S.D. 1,205 ft.

Chas. A. Hall's No. 1 B. C. Claunch, 368 ft. from N line, 160 ft. from E line of 25-ac. tract, Michael Haley Sur.
Location.

Illinois Pet. Co.'s No. 1 Atkinson, 1,650 ft. S line, 330 ft. W line 80-ac. tract, Martha J. Deen Sur.
Drlg. 1,256 ft.

Lucky Strike Oil Co.'s No. 1 Sark, 150 ft. S and E lines, Blk. 114, Scrugham Sur.
Set csg. on sand; W.O.C.

Points et al's No. 1 Fahler, 432 ft. S line, 819 ft. E line of tract, Byrna pasture.
T.D. 1,004 ft.; S.D.

Medina County

F. Brown's No. 1 Brucks, 900 ft. W line, 660 ft. S line, Brucks tract, John Ward Sur.
Set csg. 60 ft.; drlg. 103 ft.

Cinoco Oil Co.'s No. 2 Roy Taylor, 600 ft. N line, 150 ft. E line, NE¼ W½ Sur. 135.
Moving in material.

Joe Dupree's No. 1 Batto, 258 ft. from E line, 957 ft. from N line, J. Ball Sur. No. 1,478.
Drlg. 723 ft.

Letro Oil Corp.'s No. 1 E. B. Forrest, 1,928 ft. from N line, 1,908 ft. from E line of 640-ac. tract, Blk. 69.
Cmtd. sur. csg. 70 ft.; drlg. plug.

W. T. Shoemaker and L. L. Evans' No. 1 Noonan, 52.5 ft. S 2 deg. 20 ft. E of old well, Sec. 349, M. Simon Sur.
T.D. 700 ft.; lime; dry and abnd.

Nueces County

La Jita Corp.'s No. 1 King, C SE¼ SW¼ Sec. 22.
Spudding in.

N. M. Wilson's No. 1 J. C. Bluntzer, SE cor. of tract, Casa Blanco Grant.
Spudded in.

Real County

H. J. Heartwell et al's No. 2 Mrs. M. S. Perry, 250 varas from NW line, 775 varas from SW line of A.B.&M. Sur. No. 175.
Drlg. sidetracked hole 3,220 ft.

San Patricio County

Masterson et al's (Tom Graham) No. 1 Wurzbach, 330 ft. from W line, 4,350 ft. from S line of C. C. Hornsby Sur.
Standing 5,521 ft.

Willis Storms' No. 1 Hobbs, 877 ft. S and 47 deg. 30 min. E from W corner of 50-ac. tract, N 42 deg., E 622 ft. to center of tract, Delgado Sur.
Drlg. 513 ft.

Starr County

C. R. Borah's No. 1 A. Guerra, San Jose grant, 330 ft. from N and 150 ft. from E lines of Sec. 6 (NE part of county).
Fishing 3,517 ft.

Nix et al's No. 1 S.C.C.C., 150 ft. from S and W lines of Blk. 58, Jeffries Lambeth Subd.
Coring 2,641 ft.

Pedernal Oil Co.'s No. 1 Hicks et al, 187 ft. from NW line, 318 ft. from NE line of Blk. 6, Pedernal Grant.
T.D. 2,210 ft.; S.D.

Pedernal Oil Co.'s No. 1 S. Welsh, 630 ft. NE cor. Blk. 3, Pedernal grant.
Drlg. 807 ft.

Travis County

R. C. Hill's No. 1 S. A. Johnson, 1,473 ft. from SE line, 308 ft. from NE line of 80-ac. tract, John W. Haun Sur.
Top Serpentine 730 ft.; T.D. 860 ft.; Standing.

Boiling & Pew's No. 1 Lungren Est., R. E. Lundgren 113-ac. tract, Samuel Kimbro Sur.
T.S. 657 ft.; show oil; T.D. 661 ft.

G. A. Artz & Co.'s No. 1 Rolff, 454 ft. N line, 207 ft. W of tract, Hancock Sur.
T.D. 650 ft.; shale; S.D.

Webb County

Austin & Vernon's No. 1 Jefferies, 150 ft. NE line, 1,170 ft. SE line, Blk. 13, Sur. 1,453.
Set surface csg.; S.D.

D. E. C. Oil Co.'s No. 1 Slater, C Blk. 50, Sur. 15, Arispe grant.
Location.

Arthur H. Wray's No. 1 Geo. Stuempke, Share 1, Brewster pasture, Galan grant.
S.D. 1,125 ft.; new rig; to deepen.

E. T. Burton's No. 1 Billings, NE cor. of SW¼, Sur. 113.
Location.

J. E. Neal's No. 1 Laurel Bros., 1,320 ft. of S and E lines, Sur. 1,119.
Rigging up.

Willacy County

W. T. Daniel's No. 2 Armendiaz, near Rio Hondo, 7,798 ft. from E and W lines of Share 14.
S.D. 3,850 ft.

Kingwood Oil Co.'s No. 1 Santa Rosa, Inc., 160 ft. from E line, 637 ft. from S line of Sec. 30, Blk. 16, Share 44, San Juan de Carricitas grant.
No report.

Williamson County

H. B. and Otto Glass' No. 1 Albert, 3 miles SE of Taylor.
Drlg. 214 ft.; shale.

H. L. Goff et al's No. 1 Albert Kleta, 1,700 ft. from N line, 150 ft. from E line of 100-ac. tract, W. Cartwright Sur.
S.D. 1,250 ft.

Hays et al's No. 1 Pfluger, 150 ft. from E line, 150 ft. from S line, White Sur.
S.D. 915 ft.

Kothmann et al's No. 1 Albert Krueger, John Bevil Sur. No. 56, 1,466 ft. from NW line, 1,060 ft. from SW line, 118-ac. tract
No report.

Rue et al's No. 1 Chas. Bachmayer, 6 miles SE Taylor.
T.D. 800 ft.; csg. parted; fishing.

J. M. Russell's No. 4 Nelson Est., 550 vrs. NE line, 150 vrs. SE line, J. L. Justice Sur. No. 2.
T.D. 604 ft.; S.D.

Zapata County

F. H. Crow et al's No. 1 Daniel Yzaguirre, 330 ft. out of SW cor. Share 1, Porcion 14-15-16, D. Yzaguirre tract.
Lost drill stem 2,017 ft.; abnd.

Kimerow Co.'s No. 1 Santos, 330 ft. N and W lines, Blk. 26, La Huerta grant.
Drlg. 2,112 ft.

Joe Palmer's No. 1 Emma A. Markrud, 150 ft. from NE and NW lines, Blk. 22, Sur. No. 616.
Drlg. 1,023 ft.

Texas Royalty Investment Co.'s No. 1 N. J. Vela, 636 ft. from NE line, 300 ft. from NW line, Blk. 7, Por. 29.
S.D. 2,360 ft.

S. W. TEXAS PROVEN

Week Ending August 17

Carroll—Bastrop County

Fay Wilson et al's No. 1 Calahan, 7,700 ft. from NW line, 350 ft. from SW line, Mays Survey.
S.D. 325 ft.; laying wtr. line.

Bateman—Bastrop County

Batts & Jarnson's No. 1 Mrs. Annete Harris, 576 vrs. (1,600 ft.) NW line, 630 vrs. (1,750 ft.) SW line, John Maxmillan Sur. 22.
T.D. 2,300 ft.; Serpentine; show oil and gas; running tubing.

Caesar—Bee County

Commodor Oil Co.'s No. 3 Grissom, 450 ft. E of No. 1.
Set csg.; W.O.C.

El Toro Oil Co.'s No. 1 J. J. Grissom, 150 ft. from N and W lines of 10-ac. tract, P. B. Early Sur.
Spudded; no report.

Swiger et al's No. 4 Gardner, W offset to Vaughn producer.
Moving in material.

Dirks—Bee County

Dirks Bros.' No. 6 Roth, 330 ft. N line, 590 ft. E line tract, Sec. 7.
Location.

Mills Bennett Prod. Co.'s No. 2-C H. Harris, 330 ft. N line, 1,650 ft. W line, Dugat Sur.
Comp. 35 bbls. per hour on ¼-in. choke; T.P. 300 lbs.; T.D. 3,936 ft.

Mills Bennett's No. 4-B Bassinger, 330 ft. from SE cor. Sec. 7.
Comp. 50 bbls. at 4,860 ft.

Heyser, Heard & Walton's No. 1 Young, 390 ft. W of No. 7.
Rigging up.

Heyser, Heard & Walton's No. 7 Young, 660 ft. W of No. 2 Rawlins Sur.
Comp. 460 bbls. on ¼-in. choke; T.D. 3,878 ft.; T.P. 370 lbs.

Home Oil Co.'s No. 6 Bassinger, 660 ft. N of No. 5, Sec. 7.
Set csg. 3,836 ft.; W.O.C.

Texas Co.'s No. 5 Young.
Set csg. 3,881 ft.; W.O.C.

Ray—Bee County

Dirks Bros.' No. 3 Ray, 660 ft. E of No. 2 and W road to Pettus in SW¼ of Sec. 7.
1,300 ft.; no report.

L. W. Littlejohn's No. 1 J. B. Borroum, 150 ft. out of SW cor. of 234-ac. tract, Wm. Gell Sur.
Standing 135 ft.

Simms Oil Co.'s No. 1-B Campbell, SE cor. Lot 13 Campbell Subd.
Comp.; no gauge; T.D. 2,939 ft.

Simms Oil Co.'s No. 2 Ray, 660 ft. W No. 1 Ray.
Location.

Simms Oil Co.'s No. 3 Ray, 660 ft. S No. 1 Ray.
Set csg. 3,935 ft.; W.O.C.; will pump.

Sun Oil Co.'s No. 1 Rutledge, 330 ft. W line, 1,011 ft. S line, 120-ac. tract.
Testing Pettus sand 3,414-18 ft.

Worth Oil Co.'s No. 3 Rutledge, 150 ft. out of SW cor., 300 ft. S of No. 2, 15-ac. tract, A. Hadley Sur.
Spudded in; S.D.

R. J. Worthington's No. 1 Chestnut, 330 ft. NW cor. 40-ac. tract, B. O. Hadley Sur.
Spudded in; S.D.

Tuleta—Bee County

Illinois Pet. Co. et al's No. 1 Rapp, 330 ft. E line, 375 ft. NE line, 106-ac. tract, Dugat Sur.
M.I.M.

Southwest Exploration Co.'s No. 1 Heyden & Bruckhan, C of farm tract, 330 ft. from N and W lines of Sec. 20, Uranga grant.
Rigging up.

Sun Oil Co.'s No. 1 Page, 330 ft. from SE and SW lines of 160-ac. tract, Nancy J. Young Sur. A-558.
T.D. 3,888 ft.; standing full of oil.

Texas Co.'s No. 5 Young, 660 ft. E No. 4 Young.
Set surface csg.; W.O.C.

Dobrowolski—Bexar County

D. C. Pegg and B. Miller's No. 3 Katie Strunk, 450 ft. from NE line and 1,450 ft. from SE line, Katie Strunk 139.65-ac. tract, Juan Montes Sur.
T.D. 585 ft. in shale; S.D.

Von Ormy—Bexar County

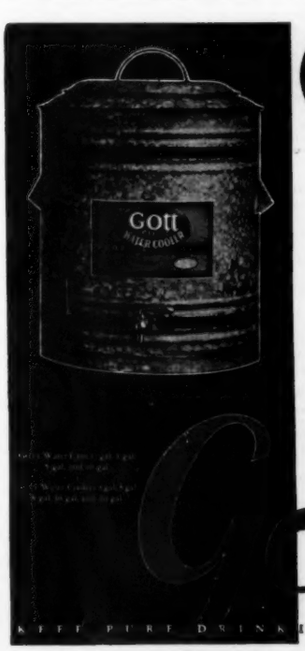
Jack Crouch's No. 2 Barragan, 550 ft. SW line, 150 ft. NW line, Juan Barragan 160-ac. tract, J. S. Simpson Sur.
Sand 600-50 ft.; T.D. 696 ft.; running tubing.

Richard Oil Co.'s No. 2 Weilbacher, 162 vrs. E line, 2,650 ft. S line, Mrs. Z. A. Mann 100-ac. tract S. McCulloch Jr., Sur. 54.
Fishing for tools 267 ft.

Umburn & Trawalter's No. 5 Wm. Biel, 450 ft. SW line (river), 150 ft. NW line Wm. Biel 160-ac. tract, John S. Simpson Sur. No. 59.
Set 10-in. csg. 27 ft.; drlg. 121 ft.

Palo Blanco—Brooks County

United Prod. Co.'s No. 1 Kathleen Jones Hocker, 1,300 ft. SW of No. 2, 1,636 ft. from N line of Los Mogneijes de Palo Blanco Grant.
Coring 3,349 ft.



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KEEP PURE DRINKING WATER ALWAYS HANDY

Bruner—Caldwell County

Dawn Oil Corp.'s No. 2 Floyd Tiller.
Derrick.

Branyon—Caldwell County

R. S. Boling's No. 2 C. F. Robertson, 575 ft. along Plum Creek from SW cor. of tract, 150 ft. from creek, John Neill Sur
T.D. 2,230 ft.; making drill stem test 2,120-2,230 ft.

Dunlap—Caldwell County

Ballard & Witting et al's No. 1 Mrs. A. C. Bridges et al, 650 ft. from NW line, 450 ft. from NE line of Soloman Seale Sur
Set 6¼-in. csg. 1,981 ft.; W.O.C.
Detroit-Texas Dev. Co.'s No. 3 Dunlap Estate, 300 ft. SW line, 1,300 ft. NW line, W. P. Dunlap 105-ac. tract, S. F. Sanders Sur.
Show oil 2,090-2,129 ft.; T.D. 2,285 ft.; set 4-in. pipe 2,094 ft.; W.O.C.
W. T. Walker's No. 3 Walker, 330 ft. SE of No. 2.
1,200 ft.; S.D.

Driscoll—Duval County

Continental Oil Co.'s No. 1-B Sevier Sur. No. 64, 660 ft. from S and E lines.
Sand 2,872-85 ft.; salt wtr.; dry and abnd.; T.D. 4,062 ft.

Government Wells Pool—Duval County

Byrd Oil Co.'s No. 3 Wright, 330 ft. N and E lines. Sur. 101.
Location.
Frank Gravis' No. 1 DeWitt, 330 ft. S and W lines, NE¼ SE¼ Sur. 46.
Location.
Highland Oil Co.'s No. 1 C. W. Hahl, Sur. 61.
Moving in material.
Magnolia Pet. Co.'s No. 1-B Hahl, 330 ft. NE cor., NW¼ NE¼ Sur. 76.
Set csg. 2,648 ft.; W.O.C.
Magnolia Pet. Co.'s No. 3 Herbst, 990 ft. W line, 330 ft. S line, Sur. 70.
Drlg. 2,943 ft.
Magnolia Pet. Co.'s No. 5 Hahl, 330 ft. N line, 2,045 ft. E line, Sur. 67.
Set csg. 2,572 ft.; sand 2,672-79 ft.; comp. 15.5 bbls. per hour.
Parr Oil Corp.'s No. 3 R. E. Glover, 330 ft. from N and E lines of SE¼ of SE¼ of Sec. 44, J. Poitevent Sur.
Location.
Smith & Storey's No. 16 Lundell, 990 ft. E line, 330 ft. N line, Sur. 48.
Set csg. 2,292 ft.; W.O.C.

Loma Novia—Duval County

Bridwell Oil Prod. Co.'s No. 1-B Hubbard, 330 ft. NE cor. NW¼ NE¼, Sur. 75.
T.D. 2,662 ft.; sand 2,660-62 ft.; drlg. plug.
Bridwell Oil Prod. Co.'s No. 1 B.C.C., 330 ft. from N and E lines of the SW SW Sec. 76.
Comp. 100 bbls.
Buchanan & Blanco Oil Co.'s No. 1-B Ruiz, 185 ft. N line, 1,650 ft. E line, Sur. 78.
Location.
Claude Hamil's No. 2 Hubbard, 330 ft. W line, 990 ft. N line, W½ Sur. 77.
Drlg. 2,122 ft.
C. Hamil's No. 1 Kerr, Sur. 41.
Comp. 25,000,000 ft. gas; sand 2,544 ft.; rods pressure 750 lbs.
H. DeLange's No. 1 B.C.C., Sur. 76.
Drlg. 1,820 ft.
Duval Oil Co.'s No. 1 Hubbard, Morris & Cummings Sur., Sec. 77, 330 ft. out of NE cor. NE¼ section.
Rigging up.
Eastern Texas Pet. Co.'s No. 1 Hubbard, 330 ft. N and E line, NW¼ Sur. 71.
Drlg. 2,367 ft.
Frank Gravis' No. 1 Flodin, 330 ft. from S and E lines of Sur. 61.
Sand 2,554-57 ft.; swabbing.
Frank Gravis' No. 3 Byland, 330 ft. S and E lines, Blk. 2, Sur. 75.
Location.
Claude Hamil's No. 2 Ruiz, 330 ft. from S and E lines of NW 100-ac. tract, Sur. 41.
Cemented csg.; W.O.C.
Henderson & Harvey's No. 1 Ruiz, 990 ft. from E line and 1,980 ft. from N line of Sur. 126.
Comp. 42 bbls. on ¼-in. choke; T.D. 2,662 ft.
Highland Oil Co.'s No. 1 Hubbard, NE cor. SE¼ Sur. 75.
Skidding derrick.
Highland Oil Co.'s No. 2 Hubbard, 330 ft. S and W lines, S½, N½ Sur. 384.
Comp. 2,730 ft.; no gauge.
Humble O. & R. Co.'s No. 3-C Welder, 2,-923 ft. E line, 1,650 ft. S line, Sur. 72.
Drlg. shale 2,643 ft.
Chas. Kleiner's No. 1 Ruiz, 1,320 ft. N line, 1,650 ft. E line, Sur. 125.
Skidding derrick.
Shell Pet. Corp.'s No. 3 Hubbard, 330 ft. E line, 990 ft. N line, SE¼ Sur. 77.
No report.
Stieren Oil Co.'s No. 3 Wright, Sur. 73
T.D. 2,714 ft.; I.P. 86 bbls. per day.
Texas Co.'s No. 7 Vela, 990 ft. E line, 330 ft. S line, Sur. 42.
Set surface csg. 161 ft.; W.O.C.
Texas Co.'s No. 8 Vela, 1,650 ft. E line, 330 ft. S line, Sur. 42.
Location.

Seven Sisters—Duval County

Atlantic Oil Co.'s No. 2 J. F. Welder, Sur. 385.
Rigging up.
Atlantic Oil Co.'s No. 1 J. F. Welder, 330 ft. N and W lines, Sur. 385.
Spudded in.
Humble O. & R. Co.'s No. 1-B Serna, 330 ft. S and W lines of lease "B", B. S.&F. Sur.
Location.
Humble Oil & Refg. Co.'s No. 2-A Serna Jr. et al, 660 ft. W of No. 1-A, 330 ft. N of S line, 1,650 ft. E of W line of Sec. 384, B.S.&F. Sur.
Comp.; sand 2,465-80 ft.; T.D. 2,480 ft.; 20,000,000 ft. gas; spraying oil.
Mid-Continent Pet. Corp.'s No. 1 Serna Jr., 330 ft. N and W lines of S½ of N½ Sur. 384.
Location.
Santa Clara Oil Co.'s No. 9 Wood-Welder, 990 ft. N line, 330 ft. E line, 160-ac. tract, Sec. 385, J. Poitevent Sur.
Set csg. 2,490 ft.; W.O.C.
Shell Pet. Corp.'s No. 4 Hubbard, 989 ft. E line, 2,310 ft. S line, Sur. 77.
Set surface csg.; W.O.C.

North Petlus—Goliad

Sun Oil Co.'s No. 4 Scarborough, 1,519 ft. SE No. 3, Sec. 25, T.&B.B. Sur.
Testing; T.D. 3,681 ft.

Pearsall—Frio County

Amerada Pet. Corp.'s No. 1 D. F. Smith et al, 4,500 ft. from NE line, 1,650 ft. from SE line, Joseph V. Mason Sur. No. 122.
Ran tubing; swabbed sulphur water through tubing; T.D. 6,232 ft.

Darst Creek—Guadalupe County

Burrows et al's No. 1 Lampke, 150 ft. N and E lines, Johns 140-ac. tract, Green DeWitt Sur. No. 13.
Location.
Texas Co.'s No. 2 Posey (workover).
Old T.D. 2,606 ft.; set 7-in. csg. at 2,575 ft.; T.D. of sidetracked hole 2,583 ft.

Dinero—Live Oak County

J. O. Whittington's No. 2 Henrietta C. Little, 2,640 ft. from SW line, 1,950 ft. from SE line, M. M. Shipp Sur.
T.D. 5,003 ft.; drlg. plug.; drill stem test shows 330 ft. oil, 75 lbs. pressure.

Three Rivers—Live Oak County

Benco Oil Corp.'s No. 1 E. Mahoney, 155 ft. from NW line of J. H. Harvey tract, 3,109 ft. SW of highway in Mark Killelly Sur.
S.D. 78 ft.

Sam Fordyce—Hidalgo County

Cortez Oil Co.'s No. 2-C Smith, 230 ft. from N line, 690 ft. from W line of NE 40 acres of Tract B-3, Porcion 41.
Location.
Cortez Oil Co.'s No. 3-C Smith, 230 ft. from N line, 1,150 ft. from W line of NE 40 acres of Tract B-3, Porcion 41.
Location.
Gem Oil Co.'s No. 3-B Seabury, 150 ft. N line, 537 ft. E line, 20-ac. tract, Por. 38.
Csg. 2,811 ft. on bottom; swabbing.
Harrison, Davis & Bishop's No. 4 Guerra, Tract 14, Porcion 41.
M.I.M.
Harrison & D. D. Oil Co.'s No. 3 Lula George, NW cor. of SW 20-ac. of tract 13, Porcion 41.
Comp. for allowable 2,753 ft.; T.P. 200 lbs.
Harrison, Davis & Bishop's No. 3 Guerra, 230 ft. from S line, 690 ft. from E line of 40-ac. tract, Tract 12, Porcion 41.
T.D. 2,753 ft.; S.D.
Henshaw et al's No. 1 Seabury, 219 ft. N line, 248 ft. E and W lines, Tract 258, Por. 38.
Set surface csg. 206 ft.; W.O.C.
Kingwood Oil Co.'s No. 4 Guerra, 165 ft. S line, 1,150 ft. E line, Share 12, Por. 41.
Location.
Kingwood Oil Co.'s No. 1 Seabury, 150 ft. NE cor. 10 acres, Tract 256, Por. 38.
Location.
Kingwood Oil Co.'s No. 6 Lawrence, 150 ft. N line, 550 ft. E line, Tract 274, Porcion 39.
Rigging up.
Kingwood Oil Co.'s No. 6 Guerra, 150 ft. from S line, 640 ft. from W line, SW 20-ac. tract, 256 Porcion 39.
Comp. 3 bbls. per hour; T.D. 2,769 ft.
Kingwood Oil Co.'s No. 4 J. Lawrence, 300 ft. from N line, 150 ft. from W line of W 40-ac. tract 274, Porcion 39.
No report.
Lacy's No. 2 Seabury, 230 ft. S line, 530 ft. W line, 6.25-ac. tract, Tract 256, Por. 38.
Spudded in; S.D.
H. J. Porter's No. 2 C. E. Smith, N end of S½ of tract in Tract 278, Porcion 40.
Spudded; S.D.
E Powell's No. 1 Lula George, SW cor. of NW 20-ac. Tract 13, Porcion 41.
Drlg. 2,162 ft.
Windsor Oil Co.'s No. 3 Doss, 630 ft. from N line, 150 ft. from W line of 65-ac. tract No. 278, Porcion 40.
Comp. 4 bbls. per hour on 3/16-in. choke; T.D. 2,752 ft.

Mercedes—Hidalgo County

Union Sulphur Co.'s No. 5 American Rio Grande, L. & I. Co., 230 ft. N line, 350 ft. W line, Tract 2,082.
Drlg. 2,862 ft.
Union Sulphur Co.'s No. 4 A.R.G.L.&I.C., 400 ft. N and W lines, Lot 1, Blk. 99, 1½ miles SW discovery well.
No report.
Union Sulphur Co.'s No. 1 American Rio Grande L. & I. Co., 400 ft. S and W of NE cor. of Lot 229, Blk. 59 (W.O.).
Coring 7,573 ft.

Sandia—Jim Wells County

Magnolia Pet. Co.'s No. 6 Seeligson, 660 ft. W, 330 ft. S of No. 3 Canales Sur. No. 29.
T.D. 7,135 ft.; drill stem in hole; abnd.

Weiner—Kendall County

Southwestern Dev. Co. Synd., Ltd.'s No. 1 W. G. Werner, 1,645 ft. from N line, 765 ft. from NW line of 320-ac. tract, J. F. Torrey Sur. No. 781.
675 ft., underreaming.

Kingsville—Kleberg County

Ray Clark's No. 1 House, Lot 5, Blk. 37, K.T.&I. Co. Sur.
S.D. 1,000 ft.
Fidelity Exploration's No. 1 Paul O. Henry, 150 ft. from N line midway E and W lines of Blk. 2, Sec. 49, K.T.&I. Sur.
2,600 ft., no report.
Fidelity Exploration Synd.'s No. 1 Vivian Kivlin, Sec. 4, Blk. 39, K.T.&I. Sur. on Vivian Kivlin lease.
Derrick blown down.

Jacob Pool—McMullen County

Loma Oil Co.'s No. 3-A Jacob, 760 ft. S line, 220 ft. E line, Sec. 7, G.H.&H. Sur.
Set csg. 900 ft.; W.O.C.
M. E. Young's No. 3-A Cox, E of Frio River across line from Lark tract in M. Hely Sur. (old well).
Sand 1,870 ft.; no report.

Loma Alta—McMullen County

Loma Oil Co.'s No. 1 Hagist, NE cor. of NW¼ of Sur. 108.
Sand 2,190-92 ft.; 2,215 ft., no report.

Hondo—Medina County

Callahan & Robert's No. 1 Ray Taylor, 1,-450 ft. NS line, 220 ft. EW line, Sur. No. 135.
T.D. 82 ft.; reaming.

Plymouth—San Patricio County

Benson & Jones' No. 1 Welder, 2,233 ft. from S line, 466 ft. from E line of Sec. 38.
T.D. 6,137 ft.; dry and abnd.
Heep Oil Corp.'s No. 4-E Welder, 466 ft. from N line, 1,399 ft. from E line of N 400-ac. tract, Sec. 46, R. Montgomery Sur.
Rigging up.
Heep Oil Corp.'s No. 5-E Welder, Sec. 46.
Rigged up.
Heep Oil Corp.'s No. 7-E Welder, 466 ft. E line, 2,032 ft. S line, Montgomery Sur., Sec. 46.
Coring 5,557 ft.
Heep Oil Co.'s No. 8-E Welder, Sec. 46.
Drlg. 5,047 ft.
Heep Oil Corp.'s No. 1-F Welder, 466 ft. N and E lines of 200-ac. tract, Sec. 46.
Coring 5,540 ft.
Magnolia Pet. Co.'s No. 2 Corpus Christi, 660 ft. S of No. 1, H. H. Hunter Sur.
Drlg. 2,683 ft.; sand.
Plymouth Oil Co.'s No. 11-C Welder, 933 ft. N, 167 ft. W, No. 5-C Welder.
Drlg. 4,529 ft.
Plymouth Oil Co.'s No. 12-C Welder, 933 ft. S line, 1,400 ft. W line, Sec. 49.
Drlg. 4,969 ft.
Plymouth Oil Co.'s No. 13-C Welder, 933 ft. N, 933 ft. W No. 3-C Welder.
Spudding in.
Plymouth Oil Co.'s No. 10-C Welder, 1,500 ft. from W line, 266 ft. from N line, Sec. 48.
T.D. 5,640 ft.; W.O.C.
Plymouth Oil Co.'s No. 9-C Welder, 1,056 ft. N, 466 ft. E of No. 4-C.
Set csg. 5,624 ft.; W.O.C.
Made gas; killed to rework.
Sun Oil Co.'s No. 1 Stone, offset to Magnolia No. 1 Corpus Christi Bank.
Location.

Los Olmos—Starr County

H. C. Horter, Trustee, No. 1 Sanchez, 150 ft. from N and W lines Blk 3, Share 74, Porcion 72.
Sand 501-05 ft.; recemented bottom.
H. C. Horton's No. 2 Sanchez, 150 ft. NW cor. Blk. 3, Share 72, Porcion 72.
Tested oil and S.W. 501-05 ft.; drlg. deeper.
Ed Linberg's No. 7 Bass, 1,500 ft. from W line, 1,675 ft. from N line of Share 6, Porcion 75.
S.D. 500 ft.

Placetas—Starr County

Hughston Oil Co.'s No. 1-A Gregg-Wood, S end of Por. 84; replacement well, 990 ft. S of State Highway No. 4.
3,370 ft.; S.D.

Rio Grande—Starr County

Hiram Reed's No. 5 D.&C., 475 ft. from E line, 185 ft. from N line of Blk. 6, Tract 21, Porcion 80.
M.I.M.
Hiram Reed's No. 1-A D. & C., Blk. 2, Tract 21, Por. 80.
Set surface csg. 20 ft.; W.O.C.
Hiram Reed's No. 6 D. & C., 150 ft. E line, 1,000 ft. S line, Blk. 6, Tract 21.
T.D. 1,384 ft.; sand 1,374-84 ft.; bailing.
Houston Oil Co.'s No. 5 Morgan, Sec. 7, Range 5.
Derrick.
W. W. Zimmerman's No. 2 D.&C. 1,122 ft. W. 150 ft. from S line of Blk. 1, Tract A-77, Porcion 81.
No report.

Saxet—Nueces County

Houston Oil Co.'s No. 4 Walton, 330 ft. EW line, 1,650 ft. NS line.
Drlg. shale and lime 2,933 ft.; no report.
Magnolia Pet. Co.'s No. 2 Sanders, 330 ft. SW cor. 110-ac. tract, Sec. 165, B.S.&F. Sur.
Derrick.
Magnolia Pet. Co.'s No. 2 W. W. Walton, 330 ft. from E line, 289 ft. from S line of 92.11-ac. tract, Enrique Villareal Sur.
Location.
Smith et al's No. 1 Walton, NW cor. 92.11-ac. tract, Enrique Villareal Sur.
Reconditioning and testing.

Bruni—Webb County

Associated Oil Co.'s No. 7 Bruni, 330 ft. from NW line, 660 ft. NE of No. 5, Blk. 7, M. Arispe grant.
Location.
Highland Oil Co.'s No. 8 Bruni, 1,650 ft. from NW line, 330 ft. from NE line, Sur. 7.
Coring 3,407 ft.; had sand 3,387-94 ft.; no report.
Highland Oil Co.'s No. 12 A. M. Bruni Estate, 530 ft. E of No. 6, 330 ft. from S line of 200-ac. tract, M. Arispe grant.
Location.
O. W. Killam's No. 39 Bruni, C Blk. 50, Sur. 15.
Drlg. 2,147 ft.

Laurel—Webb County

South Texas Oil Co.'s No. 1-A, 217 ft. S line, 83 ft. E line, Blk. 3, Sec. 269.
Blk. 3, C.C.S.D. & R.G.N.G. Sur.
T.D. 2,188 ft.; testing.

West Cole Pool—Webb County

Ross Amigos Oil Co.'s No. 1 Garcia, 111 ft. E line, 150 ft. N line, Sur. 463.
P.B. 3,205 ft.; comp. 4 bbls.
Ross Barnhart's No. 1 de la Garza, 1,500 ft. from N line, 200 ft. from E line of Sur. 262.
Standing 2,483 ft.; lost collar and bit.
James P. Goslin's No. 2 Benavides, 347 ft. NW line, 313 ft. SW line, Blk. 220.
Drlg. 1,370 ft.
Magnolia Pet. Co.'s No. 9 Seacord-Benavides, 330 ft. N and NW lines, Blk. 8, Sur. 174.
Drlg. 917 ft.
Magnolia Pet. Co.'s No. 11 B. Benavides, 530 ft. NE line, 30 ft. NW line, Blk. 487, Hale Sur., Arispe grant.
Comp.; key for repressuring.
Magnolia Pet. Co.'s No. 2-V Benavides, 347 ft. NW line, 313 ft. SW line, Blk. 224, Arispe grant.
Comp. 10 bbls. per hour, 5/16-in. choke; T.D. 2,780 ft.
Magnolia Pet. Co.'s No. 3 Benavides, Blk. 224, Arispe grant.
Drlg. 2,571 ft.
Magnolia Pet. Co.'s No. 4 Volpe-Benevides, 1,948 ft. from E line, 200 ft. from S line of Sur. 660.
Coring 3,477 ft.; sand.
Magnolia Pet. Co.'s No. 1 Seacord-Benavides, 330 ft. N and NW lines, Blk. 8, Subd. Sur. 174.
Set surface csg.
R. E. Misener's No. 1 Garza, 320 ft. E line, 200 ft. S line, NW¼ SE¼ Sur. 457.
Rigging up.
James P. Nash's No. 2 Benavides, 347 ft. NW line, 313 ft. SW line, Blk. 183, Arispe grant.
Drlg. 1,349 ft.
J. J. O'Hern's No. 1 Benavides, 347 ft. NW line, 313 ft. SW line, Blk. 220.
Drlg. 870 ft.
Texas Co.'s No. 2 Benavides, 330 ft. NW and SW lines, Blk. 288.
Swabbing 2,769 ft.

Lopez—Webb County

Mills Bennett's No. 1 Lopez, 330 ft. NW cor. E½ SW¼ Sur. 734.
Drlg. sand 1,761-68 ft.; tested salt wtr. and gas; drlg. 2,237 ft.
G. G. Mortimer's No. 2 Lopez, 1,990 ft. S line, 2,310 ft. E line, Sur. 73.
Drlg. 1,173 ft.

Noack—Williamson County

Coffield & Lanning's No. 3 Heap, 200 ft. from N line, 225 ft. from W line of tract in White Sur.
Location.
G. G. Mortimor's No. 1 Lopez, 1,333 ft. from S line, 2,310 ft. from W line, Share 15, Sur. 73.
Drlg. 800 ft.
R. R. Ogden's No. 1 Matteck, 150 ft. N and W lines of 108.5-ac. tract in White Sur.
Location.

Byersville—Williamson County

Taylor Ref. Co.'s No. 10-A Heap, 150 ft. W line, 750 ft. N line, "A" lease.
Top sand 889 ft.; T.D. 898 ft.; comp. 100 bbls.
Taylor Ref. Co.'s No. 2-B Walter Heap, 450 ft. N line, 750 ft. W line, Heap lease.
No report.
Taylor Ref. Co.'s No. 9-A Siadek, H. White Sur., 150 ft. from NE line, 1,200 ft. SE line (creek).
T.D. 700 ft.; shale; S.D.

Charco Redondo—Zapata County

Schimmel et al's No. 1 Martinez, 330 ft. from SE line and 847 ft. from NE line, Blk. 125, Share 1, Grullo Grant.
T.D. 2,080 ft.; dry and abnd.

Escobas—Zapata County

G. E. Glasco's No. 1 Haynes, 200 ft. NW and SW lines Blk. 7, Haynes Subd., Comitas & Villa Grants.
Fishing 180 ft.
Reliance Oil Co.'s No. 4 Haynes, 150 ft. SE line, 700 ft. SW line, Blk. 7, Comitas & Villa grants.
T.D. 847 ft.; S.D.
Texas Co.'s No. 74 Whitehead, 20,272 ft. SW line, 9,495 ft. SE line, Cerrito Blanco grant.
T.D. 1,249 ft.; Dry and abnd.

Lopena—Zapata County

Humble Oil & Refg. Co.'s No. 1 Dominguez, 12,785 ft. from NE line, 1,320 ft. from SE line of Porcion 31.
Drlg. sand and shale 3,517 ft.
Trowel et al's No. 1 W. Z. Guerra.
Coring brittle shale 1,790 ft.; no report.

CALIFORNIA WILDCATS

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Shell Oil Co., No. 5 Capitan, Santa Barbara Co.	5- 4-30	2,660	cmtd. 2,404
Shell Oil Co., No. 6 Capitan, Santa Barbara Co.	5- 4-30	498	sd. sh. drlg.
Shell Oil Co., No. 7 Capitan, Santa Barbara Co.	5- 4-30	....	bldg. rig
Shell Oil Co., No. 8 Capitan, Santa Barbara Co.	5- 4-30	....	rigging up
Shell Oil Co., No. 9 Capitan, Santa Barbara Co.	5- 4-30	....	grading
General Petroleum, No. 15 Capitan, Santa Barbara Co.	32- 5-30	323	cmtd. 187
Shell Oil Co., No. 1 Goleta, Santa Barbara Co.	10- 4-29	2,352	rd. sh. drlg.
Honolulu Oil Corp., No. 9 Elwood, Santa Barbara Co.	tideland	3,315	redrlg. 3,200
Barnsdall-Rio Grande, No. 12 Elwood, S. Barbara Co.	tideland	5,475	sd. sh. drlg.
Barnsdall-Rio Grande, No. 18 Elwood, S. Barbara Co.	tideland	3,000	cleaning out
Barnsdall-Rio Grande, No. 2 Elwood, S. Barbara Co.	15- 4-29	6,492	redrlg. 3,990
Bankline Oil Co., No. 10 Elwood, Santa Barbara Co.	tideland	3,835	P.B. 314
Spalding, Caroline, No. 11 Elwood, Santa Barbara Co.	tideland	....	bldg. rig
Signal Oil & Gas Co., No. 5 Elwood, Santa Barbara Co.	tideland	1,920	sd. sh. drlg.
Pacific Western, No. 15 Elwood, Santa Barbara Co.	tideland	3,690	cmtd. 3,612
Union Oil Co., No. 3 Santa Maria, Santa Barbara Co.	16-10-34	....	bldg. rig
Freeman, M. J., No. 1 Purisima, Santa Barbara Co.	11- 7-33	1,095	r. sh. drlg.
Las Posas Pet., No. 1 Las Posas, Ventura Co.	22- 3-20	8,116	recmtd. 7,255
Calco Pet. Co., No. 1 Las Posas, Ventura Co.	17- 3-20	4,160	P.B. 4,135
Union Oil Co., No. 1 Bardsdale, Ventura Co.	12- 3-20	3,788	sd. sh. drlg.
Texas Co., No. 1 Fillmore, Ventura Co.	29- 4-19	1,175	sd. sh. drlg.
Bankline Oil Co., No. 1 South Mountain, Ventura Co.	3- 3-19	....	rigging up
Texas Oil Co., No. 1 South Mountain, Ventura Co.	4- 3-19	7,423	will P.B.
Paloma Oil Co., No. 1 Susana, Ventura Co.	12- 2-18	2,686	suspended
Hull, James, No. 1 Susana, Ventura Co.	2- 2-18	398	hd. sd. drlg.
Ventura Expl. Co., No. 1 Saticoy, Ventura Co.	30- 3-22	4,232	sd. sh. drlg.
Prop. Service Corp., No. 1 Lloyd, Ventura Co.	24- 3-23	8,924	cmtd. 8,782
General Pet., No. 1 Oxnard, Ventura Co.	26- 2-23	4,681	sd. sh. drlg.
Continental Oil Co., No. 4 San Miguelito, Ventura Co.	23- 3-24	6,163	hd. sd. drlg.
C. C. M. Oil Co., No. 1 San Miguelito, Ventura Co.	23- 3-24	10,030	redrlg. 7,120
Standard Oil Co., No. 1 Lost Hills, Kern Co.	2-26-20	5,701	sd. sh. drlg.
Cumberland Oil Co., No. 1 Devil's Den, Kern Co.	17-26-18	3,263	cleaning out
Continental Oil Co., No. 2 McDonald, Kern Co.	18-28-20	1,745	sd. sh. drlg.
Belmac Drlg. Co., No. 1 McKittrick, Kern Co.	22-29-21	3,764	sd. sh. drlg.
Big McKittrick Oil Co., No. 1 McKittrick, Kern Co.	30-30-22	618	sd. sh. drlg.
General Pet. Co., No. 1 South Belridge, Kern Co.	30-28-21	11,377	suspended
Standard Oil Co., No. 2-A North Belridge, Kern Co.	36-27-30	8,550	sd. sh. drlg.
Standard Oil Co., No. 3 North Belridge, Kern Co.	36-27-20	3,994	sd. sh. drlg.
Belridge Oil Co., No. 32-35 North Belridge, Kern Co.	35-27-20	7,784	br. sh. drlg.
Belridge Oil Co., No. 33-35 North Belridge, Kern Co.	35-27-20	7,382	br. sh. drlg.
Continental Oil Co., No. 6 North Belridge, Kern Co.	36-27-20	3,946	hd. sd. drlg.
Union Oil Co., No. 19 North Belridge, Kern Co.	36-27-20	6,173	br. sh. drlg.
Union Oil Co., No. 20 North Belridge, Kern Co.	36-27-20	5,971	sd. sh. drlg.
Ohio Oil Co., No. 1 Maricopa Flats, Kern Co.	11-11-22	581	sd. sh. drlg.
Woods & Bailey, No. 1 McFarland, Kern Co.	16-26-26	800	cmtd. 782
Republic Pet. Co., No. 1 McFarland, Kern Co.	20-26-27	758	sd. sh. drlg.
Standard Oil Co., No. 1 Delano, Kern Co.	1-25-23	2,455	gas; shut in
Standard Oil Co., No. 2 Delano, Kern Co.	1-25-23	3,256	gas; shut in
Standard Oil Co., No. 4 Delano, Kern Co.	34-24-23	2,460	gas; shut in
Standard Oil Co., No. 5 Delano, Tulare Co.	33-24-23	....	grading
Trico Oil & Gas Co., No. 1 Delano, Kern Co.	3-25-23	2,525	gas well
Trico Oil & Gas Co., No. 3 Delano, Kern Co.	36-24-22	4,835	suspended
Trico Oil & Gas Co., No. 5 Delano, Kern Co.	3-25-23	2,467	gas well
Richardson & Heaston, No. 1 Kern Front, Kern Co.	5-28-28	....	rigging up
Carrec Oil Co., No. 1 Kern Front, Kern Co.	10-28-27	380	sd. sh. drlg.
National Oil Co., No. 1 Kern Front, Kern Co.	11-28-27	....	rigging up
Kern River Oilfields, No. 4 Kern Front, Kern Co.	25-28-27	1,887	cmtd. 1,803
Associated Oil Co., No. 2 Kern Front, Kern Co.	4-28-27	2,603	completing
C. C. M. Oil Co., No. 5 Kern Front, Kern Co.	23-28-27	1,820	sd. sh. drlg.
Bishop Oil Co., No. 1 Kern Front, Kern Co.	26-28-27	2,094	rig to pump
Republic Petroleum, No. 3 Kern Front, Kern Co.	24-28-27	2,109	flow 481 b.d.
Standard Oil Co., No. 3 Kern Front, Kern Co.	5-28-27	601	sd. sh. drlg.
Barnsdall Oil Co., No. 4 Mountain View, Kern Co.	32-20-29	5,212	redrlg. 4,985
Canal Oil Co., No. 1 Mountain View, Kern Co.	30-30-28	2,471	sd. sh. drlg.
C. C. M. Oil Co., No. 1 Mountain View, Kern Co.	11-30-28	6,252	sd. sh. drlg.
Hogan Pet. Co., No. 6 Mountain View, Kern Co.	29-30-29	....	rigging up
Hogan, Dana, No. 1 Mountain View, Kern Co.	32-30-29	....	rigging up
Union Oil Co., No. 8 Mountain View, Kern Co.	23-30-28	7,250	sd. sh. drlg.
National Oil Co., No. 1 Mountain View, Kern Co.	30-30-29	....	rigging up
Mohawk Oil Co., No. 12 Mountain View, Kern Co.	30-30-29	5,443	sd. sh. drlg.
Mohawk Oil Co., No. 13 Mountain View, Kern Co.	30-30-29	....	rigging up
Mohawk Oil Co., No. 14 Mountain View, Kern Co.	30-30-29	....	rigging up
Standard Oil Co., No. 9 Mountain View, Kern Co.	24-30-28	5,395	flow 5,563 b.d.
Standard Oil Co., No. 10 Mountain View, Kern Co.	23-30-28	5,281	sd. sh. drlg.
Standard Oil Co., No. 11 Mountain View, Kern Co.	13-30-28	3,827	sd. sh. drlg.
Standard Oil Co., No. 12 Mountain View, Kern Co.	24-30-28	....	bldg. rig
Wood-Callahan Oil Co., No. 1 Mountain View, Kern Co.	25-30-28	5,295	sd. sh. drlg.
Mountain View Oil Co., No. 1 Mountain View, Kern Co.	25-30-28	5,650	cleaning out
United Expl. Co., No. 1 Bakersfield, Kern Co.	22-30-27	3,784	sd. sh. drlg.
Jergins Trust, No. 10 Edison, Kern Co.	13-30-29	....	bldg. rig
Shell Oil Co., No. 9 Edison, Kern Co.	16-30-29	....	bldg. rig
Monterey Expl. Co., No. 8 Edison, Kern Co.	14-30-29	....	rig suspended
Sunday, G. M., No. 1 Edison, Kern Co.	5-30-30	501	suspended
Union Oil Co., No. 1 Edison, Kern Co.	13-30-29	....	bldg. rig
Union Oil Co., No. 2 Edison, Kern Co.	13-30-29	....	bldg. rig
General Pet., No. 5 Edison, Kern Co.	15-30-29	3,753	cleaning out
General Pet., No. 7 Edison, Kern Co.	14-30-29	....	rigging up
General Pet., No. 8 Edison, Kern Co.	24-30-29	....	bldg. rig
Appling, C. E., No. 1 Edison, Kern Co.	4-30-29	3,700	gr. sd. drlg.
Berry Oil Co., No. 1 Edison, Kern Co.	10-30-29	4,164	sd. sh. drlg.
Bauer, J. H., No. 1 Edison, Kern Co.	21-30-29	....	grading
Woodward Oil Co., No. 4 Edison, Kern Co.	36-29-29	480	suspended
Seeple, J. O., No. 1 Elk Hills, Kern Co.	5-30-24	4,854	sd. sh. drlg.
General Pet., No. 1 Arvin, Kern Co.	1-32-29	7,096	sd. sh. drlg.
Hall-Baker Co., No. 1 Arvin, Kern Co.	16-31-30	1,276	suspended
Hall-Baker Co., No. 3 Arvin, Kern Co.	21-31-30	1,916	suspended
Hutcheson & Osborne, No. 1 Arvin, Kern Co.	32-30-30	1,081	cmtd. 850
Arlington Prop. Corp., No. 1 Buttonwillow, Kern Co.	6-28-23	3,224	sd. sh. drlg.
Texas Co., No. 1 Buttonwillow, Kern Co.	6-28-23	....	rigging up
Superior Oil Co., No. 1 Semi-Tropic, Kern Co.	23-27-22	2,418	gas; shut in
Superior Oil Co., No. 2 Semi-Tropic, Kern Co.	24-27-24	....	rigging up
Fullerton Oil Co., No. 1 Semi-Tropic, Kern Co.	1-27-22	2,391	gas; shut in
Fullerton Oil Co., No. 2 Semi-Tropic, Kern Co.	14-27-23	2,463	gas; shut in
Fullerton Oil Co., No. 3 Semi-Tropic, Kern Co.	9-27-23	3,150	gas; shut in
Fullerton Oil Co., No. 4 Semi-Tropic, Kern Co.	26-27-23	2,395	gas; shut in
Fullerton Oil Co., No. 5 Semi-Tropic, Kern Co.	8-27-25	2,347	gas; shut in
Fullerton Oil Co., No. 6 Semi-Tropic, Kern Co.	25-27-23	2,441	gas; shut in
Fullerton Oil Co., No. 7 Semi-Tropic, Kern Co.	25-27-23	2,437	producing gas
Fullerton Oil Co., No. 8 Semi-Tropic, Kern Co.	25-27-23	....	bldg. rig
Fullerton Oil Co., No. 9 Semi-Tropic, Kern Co.	26-27-23	2,411	producing gas
Fullerton Oil Co., No. 10 Semi-Tropic, Kern Co.	15-27-23	2,414	producing gas
Fullerton Oil Co., No. 11 Semi-Tropic, Kern Co.	14-27-23	1,198	sd. sh. drlg.
Standard Oil Co., No. 1 Semi-Tropic, Kern Co.	8-27-23	3,200	producing gas
Standard Oil Co., No. 2 Semi-Tropic, Kern Co.	5-27-23	4,343	cleaning out
Standard Oil Co., No. 3 Semi-Tropic, Kern Co.	7-27-23	2,355	producing gas
Standard Oil Co., No. 4 Semi-Tropic, Kern Co.	9-27-23	3,242	P.B. 3,225
Standard Oil Co., No. 5 Semi-Tropic, Kern Co.	9-27-23	4,250	fish. D.P.
Standard Oil Co., No. 6 Semi-Tropic, Kern Co.	8-27-23	2,361	producing gas
Standard Oil Co., No. 7 Semi-Tropic, Kern Co.	1-27-22	3,187	sd. sh. drlg.
Standard Oil Co., No. 8 Semi-Tropic, Kern Co.	12-27-22	2,426	producing gas
Standard Oil Co., No. 9 Semi-Tropic, Kern Co.	1-27-22	....	bldg. rig
Standard Oil Co., No. 10 Semi-Tropic, Kern Co.	17-27-23	2,497	sd. sh. drlg.
Standard Oil Co., No. 11 Semi-Tropic, Kern Co.	20-27-24	....	bldg. rig
Standard Oil Co., No. 12 Semi-Tropic, Kern Co.	30-27-24	....	bldg. rig
Standard Oil Co., No. 13 Semi-Tropic, Kern Co.	6-27-23	....	location
Standard Oil Co., No. 14 Semi-Tropic, Kern Co.	26-27-23	....	location
Milham Expl. Co., No. 1 Semi-Tropic, Kern Co.	15-27-23	3,122	gas; shut in
Milham Expl. Co., No. 2 Semi-Tropic, Kern Co.	15-27-23	2,429	producing gas
Milham Expl. Co., No. 3 Semi-Tropic, Kern Co.	15-27-23	....	rig, suspended
Tejon Ridge Oil Co., No. 1 Comanche, Kern Co.	23-32-23	1,965	sd. sh. drlg.
Shell Oil Co., No. 1 Buena Vista, Kern Co.	9-32-25	3,264	hd. sd. drlg.
Ohio Oil Co., No. 2 Buena Vista, Kern Co.	32-31-26	4,197	sd. sh. drlg.
Silver Gate Oil & Gas Co., No. 1 Tejon, Kern Co.	7-10-19	1,500	sd. sh. drlg.
Hall-Baker Co., No. 1 Tejon, Kern Co.	12-11-19	1,485	sd. sh. drlg.
Taft Well Drlg. Co., No. 1 Kreyenhagen, Fresno Co.	33-22-16	3,650	sd. sh. drlg.
Pacific Expl. Co., No. 1 Kreyenhagen, Fresno Co.	17-21-17	795	sd. sh. drlg.
Union Oil Co., No. 1 Lillis-Kettleman, Fresno Co.	24-21-16	10,944	redrlg. 9,100
K.N.D.A., No. 54 Kettleman North, Fresno Co.	24-21-16	7,098	br. sh. drlg.
Standard Oil Co., No. 2 Kettleman Middle, Kings Co.	29-23-19	7,700	cmtd. 7,595
Pet. Sec., No. 1 Kettleman Middle, Kings Co.	30-23-19	3,271	sd. sh. drlg.
Continental Oil Co., No. 1 Kettleman South, Kern Co.	7-25-20	7,415	cmtd. 5,840
Farrel Pet., Well No. 1, San Luis Obispo Co.	18-31-12	1,846	sd. sh. drlg.
Willett Oil Co., No. 1 Cholame, San Luis Obispo Co.	10-25-15	3,687	suspended
Commonwealth Consd. Gas., No. 1 Tulare Lake, Kings	21-22-20	2,490	gas well
Commonwealth Consd. Gas, No. 2 Tulare Lake, Kings	21-22-20	710	suspended
Dudley Ridge Dev. Co., No. 1 Dudley Ridge, Kings Co.	24-23-20	1,300	cleaning out
Amerada Pet., No. 1 F.L.D., San Joaquin Co.	15- 2-5	6,475	sd. sh. drlg.
Amerada Pet., No. 2 F.L.D., San Joaquin Co.	15- 2-5	4,063	form. test
Pure Oil Co., No. 1 Chowchilla, Madera Co.	7-10-14	8,402	gas well; idle
Northern Counties Pet., No. 1 Tehama, Tehama Co.	25-24-3	4,807	hd. sh. drlg.
Texas Co., No. 1 Petrolia, Humboldt Co.	1- 3-2	6,133	dry; abd.
Shell Oil Co., No. 1 Branch, Monterey Co.	34-24-10	4,397	sd. sh. drlg.
Youngblood, C., No. 1 Ducor, Tulare Co.	31-23-28	....	rigging up

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well and location—	S.T.R.	Depth	Status
Republic Pet. Co., No. 1 El Segundo, Los Angeles Co.	18- 3-14	7,405	reaming
Larco Oil Co., No. 1 El Segundo, Los Angeles Co.	12- 3-15	939	sd. sh. drlg.
Associated Oil, No. 4 Inglewood Deep, Los Angeles Co.	7- 2-14	4,458	P.B. 2,700
Standard Oil, No. 7 Inglewood Deep, Los Angeles Co.	17- 2-14	3,726	cmtd. 3,696
Standard Oil, No. 8 Inglewood Deep, Los Angeles Co.	17- 2-14	3,301	flow 2,468 b.d.
Allied Pet., No. 1 Del Rey, Los Angeles Co.	28- 2-15	6,709	reaming
Blackline Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,634	suspended
Crest Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	4,400	sd. sh. drlg.
Lucas, Andrew, No. 1 Del Rey, Los Angeles Co.	35- 2-15	4,801	sd. sh. drlg.
Red Seal Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,455	completing
Mathews Pet. Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,523	cleaning out
Birch Royer Oil Co., No. 1 Del Rey, Los Angeles Co.	34- 2-15	6,532	redrlg. 6,200
Joyce Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,742	P.B. 6,695
Royalty Serv. Corp., No. 3 Del Rey, Los Angeles Co.	27- 2-15	6,575	rig to pump
Anglo American Oil, No. 1 Del Rey, Los Angeles Co.	27- 2-15	2,491	sd. sh. drlg.
Union Oil Co., No. 14 Del Rey, Los Angeles Co.	27- 2-15	3,865	pump 180 b.d.
Union Oil Co., No. 15 Del Rey, Los Angeles Co.	27- 2-15	4,982	sd. sh. drlg.
Del Rey Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	6,202	cmtd. 5,970
Treasure Oil Co., No. 1 Del Rey, Los Angeles Co.	27- 2-15	820	cmtd. 820
West American Oil Co., No. 2 Bandini, Los Angeles Co.	17- 2-12	3,104	dry; ald.
Vanco Dev. Co., No. 1 Artesia, Los Angeles Co.	25- 3-12	5,817	suspended
Eyer Pet. Co., No. 1 Torrance, Los Angeles Co.	20- 4-13	....	rigging up
Monarch Oil Corp., No. 1 Topango, Los Angeles Co.	5- 1-16	207	hd. sd. drlg.
Caminol Co., No. 1 Montebello, Los Angeles Co.	9- 2-11	....	location
Texas Co., No. 1 Montebello, Los Angeles Co.	5- 2-11	5,981	hd. sd. drlg.
Texas Co., No. 2 Montebello, Los Angeles Co.	5- 2-11	2,391	sd. sh. drlg.
Universal Consd., No. 3 Montebello, Los Angeles Co.	5- 2-11	3,941	sd. sh. drlg.
Unoversal Consd., No. 4 Montebello, Los Angeles Co.	5- 2-11	3,160	sd. sh. drlg.
Woodward Oil Co., No. 1 Montebello, Los Angeles Co.	4- 2-11	3,167	pump 140 b.d.
Wilshire Oil Co., No. 1 Montebello, Los Angeles Co.	5- 2-11	4,667	hd. sd. drlg.
Wilshire Oil Co., No. 2 Montebello, Los Angeles Co.	5- 2-11	....	rigging up
Frontier Oil Co., No. 1 Pico, Los Angeles Co.	7- 2-11	4,673	sd. sh. drlg.
Pressel & Tull, No. 1 Puente, Los Angeles Co.	30- 2-9	4,431	suspended
International Dev. Co., No. 2 Saugus, Los Angeles Co.	34- 5-16	....	foundation
Great Coastal Oil Co., No. 1 Elsinore, Riverside Co.	36- 5-5	1,525	sd. sh. drlg.
Domain Dev. Co., No. 1 Trabuco, Orange Co.	2- 6-7	900	sd. sh. drlg.
Huntington Cent. Oil Co., No. 1 Newport, Orange Co.	29- 6-10	....	rig, suspended
Viking Oil Co., No. 1 Richfield, Orange Co.	29- 3-9	3,000	redrlg. 1,297
Hillman & Long, No. 1 San Juan, San Bernardino Co.	2- 3-8	460	sd. sh. drlg.

WEST TEXAS WILDCATS

Week Ending August 17

Andrews County

Crafton Oil Co.'s No. 1 Richard & McWhorter, C NE ¼ Sec. 13, Blk. A-30, 6 mi. SE of NW cor. of county.
Elev. 3,441 ft.; show oil 4,324 ft.; drlg. 4,433 ft.

Fuhrman Pet. Corp.'s No. 2 Ford, 440 ft. from S and 1,320 ft. from E, Sec. 16, Blk. A-43.
T.P. 4,206 ft.; drlg. 4,245 ft.; flowing while drilling.

Gulf Prod. Co.'s No. 1 J. S. Kelley, 1,320 ft. from S and E, Sec. 2, Blk. A-38.
S.D. 1,770 ft.

Humble Oil & Ref. Co.'s No. 4 Means, 1,982 ft. from N and 660 ft. from E, Sec. 12, Blk. A-35.
Drlg. 1,222 ft.

Republic Prod. Co.'s No. 1 Boner-State, 2,200 ft. from S and 1,320 ft. from E. Sec. 25, Blk. A-43.
T.D. 4,505 ft.; testing; flowed 153 bbls. in 24 hrs.

Shell Pet. Corp.'s No. 1 J. S. Means, 660 ft. from S and 1,980 ft. from E lines of Sec. 2, Blk. A-35, P.S.L. Sur.
S.D. 4,135 ft.

L. G. Stogner et al's No. 1 Mrs. C. George, 660 ft. from S and E, Sec. 25, Blk. A-22, P.S.L. Sur.
S.D. 1,859 ft.

Sun Oil Co.'s No. 1 J. S. Means, 1,980 ft. from S and 660 ft. from E lines of Sec. 8, Blk. A-35, P.S.L. Sur.
Material.

J. W. Trippiehorn's No. 1 Ogden, 330 ft. from S and 2,310 ft. from W lines of Sec. 6, Blk. A-46, P.S.L. Sur.
Elev. 3,211 ft.; S.D. 4,440 ft.; may acidize.

Wahlenmaier et al's No. 1 Cox Estate, 1,320 ft. from N and W of Sec. 8, Blk. A-33.
S.D. 820 ft.

Brewster County

F. C. Dodson's No. 1 Texas American Syndicate, 660 ft. from N and E, Sec. 66, Blk. 10, G.H.&S.A. Sur.
Elev. 3,228 ft.; T.D. 1,696 ft.; pulled 8-in. csg.

Joiner et al's No. 1 McIntyre, 353 ft. from S, 2,390 ft. from E of Sec. 21, Blk. 352, W. M. Mitchell Sur.
S.D. 2,150 ft.

King & Franklin's No. 1 Gage Est., C Sec. 133, Blk. 22, G.H.&S.A. Sur.
Elev. 4,244 ft.; S.D. 1,305 ft.

G. H. Storey's No. 1 Wilson, 1,980 ft. from N and E lines of Sec. 3, Blk. 212, T.&St. L. Sur.
Elev. 3,609 ft.; S.D. 1,575 ft.

Cochran County

Kelsey's No. 1 Slaughter, C Labour 36, League 150, R.C.S. Lands.
Derrick.

West Texas Development Co.'s No. 1 Slaughter, near C of Labour 53, League 149, Randall Co. School Lands.
S.D. 100 ft.

Coke County

Haggerty et al's No. 1 Gaston, 340 ft. from S and 654 ft. from W, Sec. 11, Jos. Young Sur.
S.D. 3,225 ft.

Concho County

Maverick Oil Co.'s No. 1 Jim Rice, 330 ft. from S and W lines of NW ¼ of Sec. 18, S.N. Ry. Sur.
Location.

Crane County

American Liberty Oil Co.'s No. 1 Tubbs, 796 ft. from S and 330 ft. from W, Sec. 11, Blk. B-27, P.S.L. Sur.
Elev. 2,536 ft.; T.D. 4,050 ft.; set 7-in. csg.

Dobbs Oil Co.'s No. 1 J. Cowden et al, 330 ft. from S and E of N half, Sec. 38, Blk. 1, H.&T.C. Sur.
Drlg. 1,900 ft.

Gulf Prod. Co.'s No. 1 M. B. McKnight, 660 ft. from S and W, Sec. 9, Blk. B-31.
Elev. 2,778 ft.; T.D. 3,713 ft.; P.B. to 3,650 ft.; testing with pump.

Gulf Prod. Co.'s No. 1 Waddell, C NW NW Sec. 4, Blk. B-27, P.S.L. Sur.
Drlg. 5,350 ft.

H. L. Holloway's No. 1 Mayberry, 2,440 ft. from SW and SE, Sec. 17, Blk. 35, H.& T.C. Sur.
S.D. 934 ft.

Magnolia Pet. Co.'s No. 1 Edwards, 330 ft. from S and 1,650 ft. from E, Sec. 2, Blk. B-22.
Elev. 2,778 ft.; T.D. 3,615 ft.; P.B. to 3,540 ft.; acidized 2nd time; shot; now C.O.

Crockett County

Adkins Bros.' No. 1 Shannon, 320 ft. from S and 630 ft. from W of 80 in SW ¼ Sec. 27, Blk. WX, G.C.&S.F. Sur.
Machine.

Leslie-Hiller et al's No. 1 Todd, 1,200 ft. N and 330 ft. E, Sec. 36, Blk. WX, G.C.& S.F. Sur.
S.D. 800 ft.

Culberson County

Anderson-Prichard Oil Corp., Magnolia Pet. Co. et al's No. 1 Borders, 1,355 ft. N and 2,305 ft. from W, Sec. 34, Blk. 69, P.S.L. Sur.
Drlg. 1,528 ft.

Miller Bros.' No. 1 fee, 1,900 ft. from N and 660 ft. from E line of Sec. 21, Blk. 97, P.S.L. Sur.
S.D. 2,137 ft.

Dawson County

Adams & Turner's No. 1 John Robinson, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 46, Blk. M, E.L.&R.R. Sur.
S.D. 4,860 ft.

O. F. Dickinson, trustee's No. 1 C. H.

Doaks. 368 ft. from S and 330 ft. from E of SW cor., Sec. 4, Blk. H, E.L. Ry. Co. Sur.
S.D. 150 ft. in new hole.

Ector County

Continental Oil Co.'s No. 1 Wight, 2,200 ft. from S and W, Sec. 21, Blk. 43, Twp. 1s, T.&P. Sur.
S.D. 4,050 ft.

Gulf Prod. Co.'s No. 3 Goldsmith, 440 ft. from S and E, Sec. 22, Blk. 44, Twp. 1s, T.&P. Sur.
Standard tools rigged.

Gulf Prod. Co.'s No. 2 Goldsmith, 2,200 ft. from N and 440 ft. from E lines of Sec. 15, Blk. 44, Twp. 1s, T.&P. Sur.
Drlg. 355 ft.

Empire G. & F. Co.'s No. 2 Wight, 440 ft. from N and W, Sec. 2, Blk. 43, Twp 1s, T.&P. Sur.
Location.

Eppenauer Drlg. Co. et al's No. 1 Wight, 440 ft. from N and W of NE ¼ Sec. 22, Blk. 43, Twp. 1s, T.&P. Sur.
Top lime 3,960 ft.; top Yates 2,935 ft.; set csg. 2,975 ft.

C. L. Peters' No. 1 Connell, 330 ft. from N and E lines of NW of Sec. 12, Blk. B-16, P.S.L. Sur.
T.D. 3,296 ft.; set csg.

Phillips Pet. Co. and Pure's No. 1 C. Cowden, 2,200 ft. from N and 440 ft. from W, Sec. 14, Blk. 44, Twp. 1s, T.&P. Sur.
Elev. 3,100 ft.; T.D. 4,171 ft.; drlg. deeper.

Sun and Atlantic O. P. Co.'s No. 1 Holt, Drlg. 4,154 ft.; making 50 bbls. a day by heads.

Sun Oil Co's No. 1-B Wight, 2,200 ft. from S and 440 ft. from E, Sec. 10, Blk. 43, Twp. 1s, T.&P. Sur.
Top salt 1,880 ft.; base 2,800 ft.; drlg. 3,535 ft.

Roy Westbrook's No. 1 Yarbrough & Allen, 440 ft. from N and W, Sec. 26, Blk. B-14, P.S.L. Sur.
Standard tools.

El Paso County

Tri-State Oil Co.'s No. 1 Kinkel, 190 ft. from N and 550 ft. from E, Sec. 237, A.T.&S.F. Sur.
T.D. 985 ft.; U.R. csg.

Fisher County

Tide Water Oil Co.'s No. 1 Newman, 1,758 ft. from N and 1,054 ft. from W of NE¼ Sec. 2½, John Rodman Sur., 4 miles SE of Roby.
Material.

Glasscock County

John I. Moore et al's No. 1 J. S. McDowell, 1,980 ft. from N line and 660 ft. from E line of Sec. 22, Blk. 34, Twp. 2s, T.&P. Sur.
Topped lime 9,471 ft.; show oil and gas 9,484-9,520 ft.; increase oil 9,594-9,600 ft. and 9,633-55 ft.; bailing at 9,600 ft.; 3,000 ft. fluid in hole.

Howard County

John I. Moore et al's No. 1 Snyder, 330 ft. from S and W, Sec. 28, Blk. 30, Twp. 1s, T.&P. Sur.
Elev. 2,302 ft.; S.D. 3,010 ft.; to shoot.

Jeff Davis County

C. M. Joiner's No. 1 Jones & Coffield, 770 ft. from N and 1,322 ft. from E, Sec. 8, Blk. 3, H.&T.C. Sur.
Fishing 1,610 ft.

Jones County

J. W. Barton's No. 1 C. W. Logsdon, 150 ft. from N and 150 ft. W of Wichita Valley R.R. Sur., but in Hy. Millard Sur.
S.D. 1,900 ft.

Campbell et al's No. 1 Rowell, in E half of W half, Sec. 6, T.&P. Sur.
S.D. 2,150 ft.

R. L. Crawford's No. 1 S. R. Walser, 200 ft. from S and W, Sec. 1, T.&N.O. Sur.
Drlg. 1,732 ft.

Condor Pet. Co.'s No. 1 Asa Holt, 200 ft. from S and E lines of Sec. 2, Blk. 20, T.&P. Sur.
S.D. 1,962 ft.; to test.

Davenport & Hughes' No. 1 J. D. Farrell, 1,100 ft. from N and 1,540 ft. from E. Sec. 6, Blk. 15, T.&P. Sur.
C.O. 1,917 ft.

Farris & Fikes' No. 2 Jennings, 220 ft. from S and W of NE of SE¼ Sec. 207, B.B.B.&C. Sur.
Location.

Farris & Fikes' No. 3 Jenninga, 220 ft. from S and 660 ft. from W of NE of SE¼ Sec. 207.
Drlg. 220 ft.

Farris & Fikes' No. 1-A Jennings, 1,980 ft. from S and 150 ft. from W, Sec. 1, I.&G.N. Sur.
Location.

N. H. Martin & Son's No. 1 King, 200 ft. from N and W of E half, Sub. 5, M. Bueno Sur. 197.
Fishing 1,692 ft.

Sandy Ridge Oil Co.'s No. 3 Jones, 1,520 ft. from N and 660 ft. from W, Sec. 5, Blk. 15, T.&P. Sur.
Location.

Ungren & Frazier's No. 1 Jennings, 220 ft. from S and 660 ft. from E of E½ of NE¼ Sec. 207.
Machine.

Kimble County

Wilcox Oil & Gas Co.'s No. 1 J. Patterson, 200 ft. from N and E, Sec. 1, D.&P.R.R. Sur.
Drlg. 2,425 ft.

Loving County

D. C. Evans' No. 1 W. D. Johnson, 2,310 ft. from N and 1,650 ft. from W, Sec. 12, Blk. 57, Twp. 1, T.&P. Sur.
S.D. 2,233 ft.

Mason Oil Co.'s No. 1 Kyle, 1,980 ft. from S and E, Sec. 22, Blk. 55, Twp. 1, T.&P. Sur.
S.D. 2,823 ft.

Lynn County

Hart Oil Co.'s No. 1-A Edwards, 435 ft. from N and 865 ft. from E lines, Sec. 29, Blk. 1, L.&S.V. Sur.
Drlg. 3,322 ft.

Martin County

Wright & Scott's No. 1 Flannigan, 330 ft. N and E, Sec. 22, Blk. 37, Twp. 1s, T.&P. Sur.
S.D. 100 ft. for csg.

McCulloch County

Poulter et al's No. 2 Wyres, 50 ft. from S and 160 ft. from W, P. W. Rocins Sur.
Fishing 600 ft.

Mitchell County

Lockhart et al's No. 1 W. C. Berry, 330 ft. from N and 2,310 ft. from E. Sec. 80, Blk. 97, H.&T.C. Sur.
T.D. 235 ft.; to set csg.

Sawtell & Grueber's No. 1 Morrison.
T.D. 2,810 ft.; shot 500 qts.; C.O.; 2,000 ft. oil in hole.

Nolan County

Harris et al's No. 1 Georgia Institute of Technology, 230 ft. from S and 1,320 ft. from W. Sec. 89, Blk. 24, T.&P. Sur.
Material.

Pecos County

Comanche P. L. Co.'s No. 1 Schreff-Blackmore, 330 ft. from SW and 1,650 ft. from SE lines of Sec. 38, Blk. 3, H.&T. C. Sur.
S.D. 720 ft.

Gulf Prod. Co.'s No. 7 White & Baker, 330 ft. from N and E. Sec. 15, Blk. Z, T.C.Ry. Sur.
Location.

C. R. Richards' No. 4 Courtney, 920 ft. from N and W, Sec. 78, Blk. OW, 360 ft. S of No. 2.
Elev. 2,967 ft.; S.D. 362 ft.

Tex-Mex Pet. Co.'s No. 1 Phillips-Brandenburg, 330 ft. from S and E of N half Sec. 42, Blk. 8, H.&G.N. Sur.
Cellar.

Trans-Tex. Oil Co.'s No. 1 Caldwell, 330 ft. from E line and 330 ft. from S line of Sec. 27, Blk. 40, Twp. 9, T.&P. Sur.
Drlg. 2,700 ft.

Reagan County

Dobbs Oil Co.'s No. 2 Friend, 660 ft. from W and 1,375 ft. from S. Sec. 3, Wm. Allen Sur.
Location.

Dobbs' No. 1 Friend, 2,310 ft. from S and 660 ft. from W of Blk. 3, Wm. Allen Sur., 3 or 4 miles S of Big Lake.
S.D. 2,464 ft.; P.B. to 2,440 ft.

Culberson & Irvin's No. 1 Ringo.
Drlg. 2,065 ft.

Plymouth Oil Co.'s No. 1 Belcher, 1,320 ft. from S and 466 ft. from W. Sec. 1,231, G.C.&S.F. Sur., 4 miles SE of Centralia.
Machine.

Sun Oil Co.'s No. 1 L. W. Young, Sec. 1, G.C.&S.F. Sur., Abst. 170.
Material.

Reeves County

Dunigan's No. 1 Davis, 330 ft. from N and W, Sec. 7, Blk. 58, P.S.L. Sur.
Location.

Grisham-Hunter Corp.'s No. 1 T. P. Land Trust, 1,320 ft. from S and W lines, Sec. 27, Blk. 57, Twp. 2, T.&P. Sur.
S.D. 823 ft.

Herbert Oil Co.'s No. 1 Williams & Walker, 5,280 ft. from S and 1,320 ft. from E. Sec. 17, Blk. 6, H.&G.N. Sur.
Elev. 2,536 ft.; drlg. 4,912 ft.

K. Slack et al's No. 1 Reeves, C NW ¼ Sec. 20, Blk. 56, P.S.L. Sur., 22 mi. N of Toyah.
T.D. 2,035 ft.; running csg.

Washington Oil Co.'s No. 1 J. M. Radford Grocery Co., 2,640 ft. from S and 340 ft. from E. Sec. 39, Blk. 56, P.S.L. Sur.
T.D. 502 ft.

Runnels County

John Caster et al's No. 1 Giesecke, 330 ft. from N and 713 ft. from E, Sub. 3, Blk. 130, J. Hughes Sur. 227.
Rigged up.

Wolverton's No. 1 Willingham, 200 ft. from river and in C of Wilhelm-Wolfgang Sur. No. 425, 1¼ mi. SE of Ballinger.
Fishing 3,460 ft.

Schleicher County

John M. Cooper et al's No. 1 Bert Page, 1,320 ft. from N line, 1,470 ft. from W line of Sec. 40, Blk. L, G.H.&S.A. Sur.
T.D. 6,257 ft.; to P.B. to 5,555 ft. and acidize.

W. C. Proctor et al's No. 1 Judkins & Spencer, C SW ¼ Sec. 4, Blk. V-28.
S.D. 1,872 ft.

Scurry County

Coffield & Guthrie's No. 1 Wade, 990 ft. from N and 330 ft. from W, Sec. 115, Blk. 97, H.&T.C. Sur.
R.U. spudder.

M. L. Goss et al's No. 1 J. E. Murphy, 330 ft. from N and 1,650 ft. from E, Sec. 114, Blk. 97, H.&T.C. Sur.
Elev. 2,287 ft.; T.D. 2,343 ft.; C.O.; to put on pump.

Magnolia Pet. Co.'s No. 1 W. M. Scott, 330 ft. from S and W, Sec. 186, Blk. 3, H.&G.N. Sur., 5 mi. S of Snyder.
R.U. standard tools.

Sutton County

Paul C. Teas' No. 1 G. S. Allison, 660 ft. from S and W, Sec. 49, Blk. A, G.W.T. &P. Sur.
Moving in material.

Taylor County

Anderson et al's No. 1 J. C. High, 2,310 ft. from N and 990 ft. from E, Sec. 8, L.&L. Sur.
Rigged up machine.

Hickok's No. 1 Tittle, 660 ft. from N and W, Sec. 37, Blk. 19, T.&P. Sur.
T.D. 810 ft.; U.R. csg.

Skaggs & Brewer's No. 1 McClure, 330 ft. from N and E, S half SW Sec. 8, L.A.L. Sur.
T.D. 1,910 ft.

Tom Green County

Twin Oil Co.'s No. 1 W. E. Green, 1,050 ft. from N and 1,400 ft. from W, L. P. Moore Sur. 169½.
S.D. 315 ft.

Upton County

Gulf Prod. Co.'s No. 103 McElroy, 1,980 ft. from S and 660 ft. from W, Sec. 197, Blk. F, C.C.S.D.&R.G.N.G. Sur.
T.D. 12,786 ft.; P.B. to 8,286 ft.; shot with 380 qts. from 8,126-8,270 ft.; testing.

Humble Oil & Ref. Co.'s No. 1 Pollock, C of NW, Sec. 4, Blk. M.
Drlg. 8,640 ft.

J. G. McKenzie's No. 1 Taylor, 1,650 ft. from S and 330 ft. from E lines of Sec 22, Blk. B-2, G.H.&S.F. Sur.
T.D. 625 ft.; repairs.

W. C. Ray's No. 1 Cordova-Union, 2,035 ft. from S and 2,895 ft. from W of NE ¼ Sec. 3, A.B. Sur., 5 mi. SE of McCamey.
Material.

Ward County

Alexander's No. 1 Richter, 1,650 ft. from NW, 1,170 ft. from NE line of Sec. 27, Blk. 34, H.&T.C. Sur.
T.D. 2,455 ft.

Harry Adams Corp.'s No. 1 Gulf-Bray, 330 ft. from NE and NW, Sec. 14, Blk. 5, H.&T.C. Sur.
Drlg. 79 ft.

California Co. et al's No. 1 McFarland, 990 ft. from NE and 330 ft. from SE, Sec. 29, Blk. 34, H.&T.C. Sur.
Drlg. 758 ft.

California Co.'s No. 1 Walling & Costley, 2,310 ft from SE and 330 ft. from NE lines of Sec. 18, Blk. 34, H.&T.C. Sur.
S.D. 852 ft.

Caprito's No. 1 Hardage & Wilson, 2,310 ft. from NE and 990 ft. from SE, Sec. 11, Blk. 34, H.&T.C. Sur.
T.D. 2,553 ft.; shot; testing.

Eastland Oil Co.'s No. 1 Johnson, 330 ft. NW and NE, Sec. 24, Blk. 34, H.&T.C. Sur.
S.D. 2,570 ft.

Empire G. & F. Co.'s No. 2 Smith, 990 ft. from N and 1,650 ft. from E, Sec. 5, Blk. F.
Rigged up standard tools.

Hill et al's No. 1 Clements, 330 ft. from NW and 990 ft. from SW, Sec. 24, Blk. 5, H.&T.C. Sur.
Drlg. 227 ft.

Ice & Luce's No. 1 Baker, 1,650 ft. from NE and 330 ft. from NW, Sec. 15, Blk. 5, H.&T.C. Sur.
Drlg. 912 ft.

Skelly Oil Co.'s No. 1 Citizens Natl. Bank, 330 ft. from SE and SW lines of Sec. 40 Blk. 34, H.&T.C. Sur.
T.D. 2,472 ft.; testing.

Jerry Sines' No. 1 Brown, 330 ft. from NW and NE, Sec. 13, Blk. 5, H.&T.C. Sur.
T.D. 2,148 ft.; P.B. 2,075 ft.; S.D.

Abell Brothers' No. 1 Potts, 2,310 ft. from SE and 990 ft. from SW lines of Sec. 28, Blk. B-29, P.S.L. Sur.
T.D. 2,391 ft.; testing.

West Texas O. & R. Co.'s No. 1-C University, 330 ft. from N and E, Sec. 6, Blk. 16.
T.D. 2,668 ft.; P.B. 2,567 ft.; flowing 25 bbls. day; showing some water.

Winkler County

Emperor Oil Co.'s No. 1 Halley, 1,650 ft. from S and 330 ft. from E, Sec. 12, Blk. B-12.
Elev. 2,764 ft.; Fishing 2,714 ft. after gas blowout.

Fox & Butler's No. 2 Brown & Altman, 2,310 ft. from S and 1,650 ft. from E, Sec. 6, Blk. B-5.
Elev. 2,847 ft.; T.D. 2,054 ft.; C.O.

Gulf Prod. Co.'s No. 1 Keystone Cattle Co., NE of NW, Sec. 10, Blk. B-3, P.S.L. Sur.
Elev. 2,942 ft.; shut in 3,520 ft.

Gulf Prod. Co.'s No. 2 Keystone Cattle Co., NW cor. Sec. 17, Blk. B-2.
Elev. 2,951 ft.; T.D. 3,702 ft.; C.O. after acidizing.

Gulf Prod. Co.'s No. 3 Keystone Cattle Co., 330 ft. from N and W of NE ¼ Sec. 11, Blk. B-3.
Drlg. 3,520 ft.

Gulf Prod. Co.'s No. 4 Keystone Cattle Co., 330 ft. from N and E, Sec. 20, Blk. B-3.
T.D. 3,688 ft.; C.O.

Gulf Prod. Co.'s No. 5 Keystone Cattle Co., 330 ft. from N and W of SW ¼ Sec. 6, Blk. B-2.
Elev. 2,952 ft.; fishing 2,500 ft.

Gulf Prod. Co.'s No. 6 Keystone Cattle Co., 330 ft. from N and W of NE ¼ Sec. 16, Blk. B-2.
Elev. 2,950 ft.; drlg. 3,712 ft.

Gulf Prod. Co.'s No. 7 Keystone Cattle Co., 330 ft. from N and W of SW ¼ Sec. 14, Blk. B-2.
Elev. 2,954 ft.; drlg. 3,565 ft.

Gulf Prod. Co.'s No. 8 Keystone Cattle Co. 330 ft. from S and W of Sec. 13, Blk. B-2.
Elev. 2,964 ft.; T.D. 3,754 ft.; hole bailed; showed no oil or gas.

Gulf Prod. Co.'s No. 9 Keystone Cattle Co., 330 ft. from S and W of Sec. 18, Blk. B-2.
Elev. 2,946 ft.; drlg. 3,051 ft.

Humble Oil & Ref. Co.'s No. 2-A Walton, 660 ft. from S and W, Sec. 48, Blk. 36.
Drlg. 2,433 ft.

K-D Oil Co.'s No. 1 P. Mitchell, 1,650 ft. from N and 2,310 ft. from E, Sec. 33, Blk. B-10, P.S.L. Sur.
Cable tools rigged up.

J. C. Maxwell's No. 1 Brown & Altman, 2,310 ft. from N and 990 ft. from W, Sec. 6, Blk. B-5.
Elev. 2,844 ft.; T.D. 3,200 ft.; C.O. after shot; made 140 bbls. day.

Mascho Oil Co.'s No. 1 Evans, 1,320 ft. from N and W, Sec. 8, Blk. A-56.
Location.

Mascho Oil Co.'s No. 1 Evans, 1,170 ft. from N and 1,320 ft. from W, Sec. 46, Blk. 73, P.S.L. Sur.
Drlg. 110 ft.

Richardson's No. 1 B. F. Jenkins, 440 ft. from S and E, Sec. 12, Blk. 77, P.S.L. Derrick; rotary tools.

Richardson's No. 1 Walton, 440 ft. from S and 2,200 ft. from W, Sec. 1, Blk. B-3.
Rigged up rotary.

Richardson's No. 1 Walton, 1,010 ft. from S and 330 ft. from W, Sec. 1, Blk. B-3.
T.D. 3,600 ft.; flowing 17 bbls. fluid per hour, 30 per cent mud and water.

Skelly Oil Co.'s No. 2 Halley, 1,320 ft. from N and 2,200 ft. from E. Sec. 25, Blk. B-11, P.S.L. Sur.
S.D. 3,090 ft.

Skelly Oil Co.'s No. 3 Halley, 2,200 ft. from N and 1,320 ft. from E, Sec. 25, Blk. B-11.
T.D. 3,202 ft.; reaming.

Sioux Oil Co.'s No. 1 Lowett, 330 ft. from N and E, Sec. 36, Blk. 26, P.S.L. Sur.
Drlg. 2,800 ft.

Sun Oil Co.'s No. 1 Halley, 2,200 ft. from N and 440 ft. from E, Sec. 24, Blk. B-13, P.S.L. Sur.
T.D. 3,170 ft.; P.B. 2,732 ft.; heading oil and water.

Weaver et al's No. 1 T. Morton, 330 ft. from S and E of N half, Sec. 11, Blk. B-12.
Elev. 2,767 ft.; T.D. 2,948 ft.; P.B. 2,937 ft.; swabbing from 30 to 40 bbls. day.

Westbrook's No. 1 Brown & Altman, 2,310 ft. from N and E, Sec. 5, Blk. B-5.
Location.

Wilgo Oil Corp.'s No. 1 Campbell, 900 ft. from N and 300 ft. from E, Sec. 2, Blk. 5, P.S.L. Sur., 3 mi. E of Kermit.
Elev. 2,884 ft.; T.D. 4,639 ft.; pulling pipe to shoot.

Yoakum County

C. J. Davidson et al's No. 1 Bennett, 1,320 ft. from N and E, Sec. 678, John H. Gibson Sur.
Elev. 3,557 ft.; T.D. 3,540 ft.; recemented cave third time.

Texas Panhandle Wildcats

Week Ending August 17

Carson County

Danube Oil Co.'s No. 1 Byrum, 308 ft. from N and 409 ft. from E of N½ of NE¼ Sec. 107, Blk. 4, I.&G.N. Sur.
T.P. 3,095 ft.; T.D. 3,167 ft.; P.B. to 3,150 ft.; swbd. 35 to 50 bbls. oil and some wtr.

Robert Watchorn's No. 1 Eller, 330 ft. from S and E lines of W½ and SE¼ of Sec. 9, Blk. 7, H.&G.N. Sur.
T.D. 3,801 ft.; P.B. to 3,050 ft.; may shoot.

Childress County

Alma Oil Co.'s No. 1 Lowe, 660 ft. from N and W of SW¼ Sec. 417, Blk. H, W.&N.W. Sur., S of Kirkland.
Drlg. 6,525 ft.

Larkins & Warr's No. 1 M. F. Williams, at common corners of Secs. 507, 483, 484 and 508, Blk. H, W.&N.W. Sur.
Fishing 2,300 ft.

Collingsworth County

Smith Bros.' No. 1 Pierce, C NE¼ Sec. 107, Blk. 21, H.&G.N. Sur.
Drlg. 1,552 ft.

Cottle County

Texas Co.'s No. 9 Johnson, 500 ft. N and 318 ft. W of most northerly cor. of J. A. Smith Sur.
Drlg. 3,601 ft.

Dallam County

Eben Warner's No. 1 Jarboe, 1,520 ft. from S line, 415 ft. from W line, Sec. 2, B.&B. Sur.
S.D. 3,460 ft.

Gray County

Bell O. & G. Co.'s No. 1 Furneaux, 434 ft. from S and E lines of SE¼ of Sec. 110, Blk. B-2, H.&G.N. Sur.
S.D. 3,262 ft. for connection.

Clark & Smith's No. 1-B Short, 126 ft. from N and 330 ft. from E of NW 40 acres, Sec. 2, Blk. 1, H.&G.N. Sur.
Drilling Exploration Co.'s No. 1 Lapold, 330 ft. S and W, Sec. 141, Blk. 3, I.& G.N. Sur.
Material.

Tom Doswell's No. 1 Herndon, 330 ft. from S and W lines of SE¼ of SW¼ of Sec. 166, Blk. 3, I.&G.N. Sur.

Farliss et al's No. 1 Ball, 330 ft. from S and E lines of NW¼ of Sec. 6, Blk. 3, B.B. Sur.
Shut down.

Hagy et al's No. 1 Chadwick, 320 ft. N and E, Sec. 210, Blk. B-21, H.&G.N. Sur.
T.D. 3,000 ft.; to set csg.

PERSONAL PARAGRAPHS

MAYNARD TAXMAN, vice president of the Tax man Refining Company, Inc., Wichita Falls, Tex., was in Tulsa on business this week.

R. E. HARDWICKE, well known oil attorney of Fort Worth, Tex., has just returned from a vacation spent in California and rainbow trout fishing in Colorado.

H. M. HARVIN has been made division engineer in charge of the North Texas and New Mexico division for the Stanolind Oil & Gas Company, with headquarters at Fort Worth, Tex.

ALLEN ARMSTRONG, secretary of the Association of Producers of Petroleum in Mexico, with headquarters in Mexico City, D. F., is making a business trip in the United States. He is now in Fort Worth, Tex., and will visit Tulsa this week.

S. J. HACKETT, of Regina, Saskatchewan, president and general manager of Petroleum Securities, Ltd., left Edmonton recently by airplane for a hunting and exploration trip in northern Canada. Mr. Hackett is connected with independent refining interests in Saskatchewan and Alberta.

HARRY HOLCOMB, Fort Worth, Tex., has been transferred to Rodessa, La., as representative for the Mid-Continent Supply Company.

E. M. CRAIG, of Vancouver, British Columbia, president and managing director of Mar Jon Oil Company, is visiting in Toronto, Ontario.

WILLIAM A. R. BRAYBROOK, who has been spending the past two months with his parents in Petrolia, Ontario, left recently via New York for Negritos, Peru, to resume his duties with the International Petroleum Company.

G. W. CURRIE and family, who have been spending some months in Petrolia and other Ontario points, have left via New York for Negritos, Peru, where Mr. Currie has a new contract with the International Petroleum Company.

R. A. WILSON, president of the Kibele Manufacturing Company of Dallas, Tex., in company with his son, JIM, and his brother, WILLIAM R. WILSON, Kibele representative in East Texas, have left on an automobile trip for New York State and Canadian points.

MR. and MRS. CLIFF HACKETT, of London, Ontario, have left for Peru, where Mr. Hackett will join the International Petroleum staff.

COL. H. H. JOHNSON, scout and land man for the Gulf Production Company, Midland, Tex., has been transferred to the operating headquarters of the company at Houston, Tex.

ERIC G. SCHROEDER, vice president and sales manager for Kibele Manufacturing Company of Dallas, Tex., and FRANK R. GUNN, company representative, have completed an extensive trip through Oklahoma and Kansas oil fields.

MAJ. D. H. YOUNG, head of the aviation sales for the Pure Oil Company, Columbus, Ohio, and F. F. SEFTON, zone manager for the Pure Oil Company, Minneapolis, Minn., flew to Fort Worth, Tex., and thence to Shreveport, La.

H. B. THOMSON, production engineer in the Texas producing division for the Pure Oil Company, Fort Worth, Tex., has been transferred to Saginaw, Mich., to assume a similar position in the company's Michigan producing division.

TOM GAILBRAITH, district geologist for the California Company at San Antonio, Tex., was a business visitor to Houston, Tex.

JIMMY CHARLTON, with the California Oil Company at San Antonio, Tex., is spending several weeks in Houston, Tex., on business.

JOHN BROWN, chief executive of the Socony-Vacuum Oil Company, arrived in Los Angeles, Calif., last week on a business and pleasure trip.

PAT V. HITT, in the land department for the Shell Petroleum Corporation, was a business visitor to Corpus Christi, Tex., the past week.

GEORGE A. PETERKIN, Williams Brothers Contracting Company, Tulsa, is combining business and pleasure during a trip to New Mexico.

W. J. (JERRY) HAWKINS has been appointed acting Southwest division manager of the Gilmore Oil Company, and will maintain offices in Los Angeles, Calif.

J. R. GAHAN, vice president, and W. B. ROYER, land man for the Tide Water Oil Company at Houston, Tex., were business visitors to Coastal Louisiana the past week.

J. C. HACKETT and H. R. McDONALD, of the International Petroleum Company, Ltd., accompanied by their wives, left New York City last week for Talara, Peru.

JAMES R. SANDERSON, vice president of the Petroleum Conversion Corporation, New York City, visited several Michigan oil fields last week making a refinery survey.

WILLIAM J. KEMNITZER, petroleum technologist, has been appointed special technical advisor to the California Senate Committee investigating tideland drilling on state oil lands by SENATOR CULBERT OLSON, chairman of the committee.

Do You Remember?

From The Oil and Gas Journal Files

25 YEARS AGO

August 25, 1910

William S. Porter, one of the organizers of the Associated Oil Co., California, is president of the new Central Fuel Co., and George C. Priestly, vice president and general manager. The company last week closed the purchase of leases and production of 26 corporate and individual operators in northeastern Oklahoma, and starts off with a production of 18,000 bbls. per day. There are reported to be 3,000 stockholders in the new company.

The second gusher in the Lakeview Field in California, American Oil Fields' No. 79, continues to pour out over 21,000 bbls. a day of heavy oil.

Deaths of the week in the oil fraternity included William R. Reck, Bradford, Pa.; James Rynd, Perrysville, Pa.; Joseph C. Keefer, Parker, Pa.; William Elder, Trinidad; Jack Stroup, Sistersville, W. Va.; John J. McVay, Kansas City; Frank Tucker, Vicksburg, Miss.

20 YEARS AGO

August 26, 1915

The crude market grows stronger steadily and Mid-Continent producers think it will reach $1 per barrel, or 25 cents more than at present.

John R. Manion, of Tulsa, and William H. Heffernan, of Steubenville, Ohio, former Oil City, Pa., residents, are banqueted in Oil City. E. E. Seep, son of Joseph Seep, was toastmaster on the occasion.

Deaths of oil men recorded this week include Thomas Anderton, Oil City, Pa.; Lee G. Hitchcock, Olean, N. Y.; James B. Pearson, Bradford, Pa., and Henry Cobham, Warren, Pa. Mr. Cobham bequeathed to the Salvation Army a 640-acre oil property in Warren County, Pennsylvania, worth $100,000, and a valuable estate in England.

10 YEARS AGO

August 27, 1925

John C. Looker, of Rixford, Pa., sells his 1,200 acres of oil lands to the Petroleum Reclamation Co. of Bradford, Pa., for a reported consideration of $1,500,000. Mr. Looker lived on the block of land for 45 years, producing oil and farming, and gradually acquiring the land by purchase, turning down all offers for it until he got his price.

Five companies, Gulf, Standard of Louisiana, Humble, Lion, and Texas, are producing one-third of the 233,000 bbls. being currently produced in the Smackover, Arkansas, Field. The above five and six other companies produce 50 per cent of the daily output.

PETER A. McKILLOP, who has represented the Vacuum Oil Company in Scotland for years, has retired.

J. K. McGOLDRICK, president of the Texas Pipe Line Company of Oklahoma, Tulsa, is in Colorado enjoying a vacation.

CLAUDE F. DALLY, consulting geologist of Fort Worth, Tex., has returned from a business trip to New Orleans, La.

W. A. BREDSCHNEDER, Bali, Dutch East Indies, is spending a short vacation in Los Angeles, Calif., but will leave shortly for Holland.

S. E. NORD has been elected vice president and general manager of the Standard Oil Company of British Columbia, a subsidiary of the Standard Oil Company of California.

E. J. CHANCEY, in the land, leasing and scouting department of the Gulf Production Company, Fort Worth, Tex., reports the arrival of an 8-pound 2-ounce girl on August 8.

TOM DAMBAK has been named manager and EARL MASSENGALE assistant manager, of the new branch of the Halliburton Oil Well Cementing Company recently established at Mount Pleasant, Mich.

E. V. HEWITT, formerly division mechanical engineer for the Shell Petroleum Corporation at Iowa, in Coastal Louisiana, has accepted a position with J. Ray McDermott & Company at Houston, Tex.

RUSSELL F. RYAN, petroleum geologist, and A. S. PARKS, petroleum engineer, have formed a partnership to do consulting work and have established offices in the Sterling Building at Houston, Tex.

H. ALLEN BARNES, sales engineer, Parkersburg Rig & Reel Company, Tulsa, and MISS RHEA FRAZIER, secretary to HOLLY AN-

DERSON, county attorney of Tulsa County, were married August 16 and are now on their honeymoon in Philadelphia, Pa.

FRANK R. BRAMAN, National Tube Company, Tulsa, is spending his two weeks' vacation at his old home at Lorain, Ohio.

GORDON BIRD, with the Hydril Company of California, spent the past week in West Texas, instructing drillers in the use of equipment.

GROVER C. POTTER, chief geologist for the Double-D Oil Company left Mission, Tex., July 15 for a two weeks' vacation in Tulsa and Chicago.

R. B. (IKE) DOWNING, independent geologist, Wichita, Kans., made a quick trip to Tulsa early last week.

JOHN L. FERGUSON, geologist, Amerada Petroleum Corporation, Tulsa, was in Kansas on company business last week.

E. T. WILSON, formerly an official of the Continental Oil Company, is spending the summer in New York City and eastern points.

T. T. FREEMAN, head of the land department for the Texas Company, Fort Worth, Tex., is on vacation with his family in Denver, Colo.

JAMES F. BLAKE, general superintendent of the Sinclair Prairie Pipe Line Company, is visiting at Atlantic City, N. J., and other eastern points.

W. T. BOSTWICK, scout for the Texas Company, has been transferred from Lea County, New Mexico, to Midland, Tex., to scout West Texas.

RALPH E. FAIR, president of Ralph E. Fair, Inc., of Dallas, Tex., is spending several weeks in Europe. He plans to be in Rumania for the greater part of the time.

JOE KILCHENSTEIN, Texas division production superintendent for the Magnolia Petroleum Company, Dallas, Tex., with his family, is on vacation at points in South and Southwest Texas.

DON LEACH, Mid-Continent representative for the Chicago Bridge & Iron Works, returned to Tulsa Sunday after spending two weeks in Iowa and Wisconsin on a vacation trip with his family.

SOL SANDERS, Longview, Tex., and MISS JIMMIE VERMELLE SPRUILL, of Bowie, Tex., were married in Bowie August 14 and are now on a honeymoon in Mexico City. D. F. Mr. Sanders is superintendent for the Guiberson Oil Corporation.

F. (D.) DAVENPORT, president of the Double-D Oil Company of Mission, Tex., is taking a six weeks' vacation in Colorado and Banff, Alberta, Canada. He will return to Mission by way of Chicago, September 1.

CHARLES SNYDER, of Chicago, largely interested in oil refining activities at Montreal, P. Q., left Edmonton recently by airplane for the Rocky Mountain area of northern British Columbia to collect pictures and specimens for the National Museum of Canada and the Museum of Natural History in New York. He will return late in September. This is Mr. Snyder's thirty-second expedition into the Canadian Rockies.

N. M. CHRISTENSEN, sales manager for the Staytite Company, Houston, Tex., is in Tulsa on business. Before returning to Houston Mr. Christensen will call on the trade in the St. Louis and Chicago districts.

W. C. TROUT, president of Lufkin Foundry & Machine Company, and MRS. TROUT have returned from a three weeks' vacation trip that carried them to Chicago, Cleveland, and New York. At New York they were joined by A. V. SIMONSON, Lufkin's export representative, and MRS. SIMONSON, and from this point they toured the New England states.

Now Magnolia Vice President

L. S. Sinclair, recently made a vice president of the Magnolia Petroleum Company and Magnolia Pipe Line Company, might be said to have grown up in the Magnolia organization, for starting as a clerk in the cashier's office in Corsicana in 1914, he has been with the company ever since.

L. S. SINCLAIR

Mr. Sinclair was born in 1891 in Mexia, Tex., which years later was to be the scene of one of the most interesting oil booms in the state's history. He attended the grade and high schools in that town and following his graduation got a job in a country bank in Hill County. He was 23 when he joined the Magnolia organization in Corsicana, and he went with the company to Dallas the next year.

In 1920 Mr. Sinclair was promoted to assistant treasurer and he became comptroller June 1, 1932, continuing in that office till his advancement to the two vice presidencies. He is a director of the Magnolia Petroleum Company and of the Magnolia Pipe Line Company. He served on the American Petroleum Institute's accounting committee. He made a study of oil and tax accounting and is recognized as an expert in that field.

Mr. Sinclair was married in 1916. He is active in Masonry and is a member of Hella Temple of the Shrine in Dallas. There was plenty of hunting and fishing in the region of Mexia, where he passed his boyhood, and he acquired a strong liking for these sports, to which he still devotes as much of his limited leisure as he can. When there is not time to get out to the woods and streams he contents himself with golf, most of his playing being done on the links of the Dallas Country Club.

H. C. TAYLOR, in the comptroller's department of the Magnolia Petroleum Company, Dallas, Tex., with his family is enjoying a vacation in Birmingham, Ala.

R. M. CHAN, formerly with the Socony-Vacuum in New York City, has been transferred to Dallas, Tex., in the comptroller's department, Magnolia Petroleum Company.

E. J. HARTFELDER, who formerly had been with RAY COLLINS since 1930, has joined the scouting department of the Stanolind Crude Oil Purchasing Company.

F. M. BANKS, vice president in charge of sales of the Southern California Gas Company, has been nominated for vice chairman of the commercial section of the American Gas Association.

L. E. McGONIGLE, who has been a chemist at the Shell Oil Company's Wilmington, Calif., refinery for some time, has been transferred to the main office of the company at San Francisco, Calif.

L. M. DEUTSCH, formerly representative for Happy Belting Company in the East Texas Field and later in the Panhandle Field, has resigned from that company and taken a position with the Mechanical Rubber Company. His headquarters will be at Tulsa.

L. C. CASE, chemist, Gypsy Oil Company, Tulsa, accompanied by MRS. CASE and LESLIE, JR., is making an extended trip during vacation time. He is driving to Nevada and returning by way of Wyoming and through the famed Black Hills of South Dakota.

GEORGE D. LOCKE, vice president of the Barnsdall Oil Corporation, who for several years has resided in Chicago, has removed his family to Tulsa where he will make his home in the future.

DR. CHARLES CAMSELL, deputy minister of mines for Canada, will make a 10,000-mile aerial survey of northern Canada from Wrangell, Alaska, through British Columbia and Alberta. He will be accompanied by A. D. McLEAN, superintendent of airways, and W. H. SUTHERLAND, engineer-photographer, with "PUNCH" DICKENS as pilot.

R. C. BARBOUR, division superintendent; J. W. HOUSE, assistant division superintendent; J. BEN CARSBY, division geologist, and R. S. DEWEY, division petroleum engineer, all with the Humble Oil & Refining Company, have been moved with many other Humble Oil & Refining Company employes from McCamey, Tex., to Midland, Tex., where 23 houses owned by the company, but purchased by Midland business men, are to be moved and sold or leased to the Humble employes moving to Midland. The company will have offices on one floor of the Petroleum Building at Midland.

L. A. OGDEN has been transferred by the Pure Oil Company to Fort Worth, Tex., to become production engineer for the Texas producing division of the company. He has been holding the same position in the company's southwestern producing division at Tulsa.

M. T. PEYTON, in the land department of the Pure Oil Company, has been transferred from Fort Worth to Houston, Tex. PORTER FORREST, also in the land department, has returned to Texas after a several months' stay in the same company's Michigan producing division.

DAN McREIB, MRS. McREIB and daughter, JANE, all of Shanghai, China, are in the United States on a protracted vacation, spending the first part of their visit with friends and relatives at Amarillo, Tex. Mr. McReib is with the Socony-Vacuum Oil Company in Shanghai.

JOHN SCOTT, who recently retired from the position of oil and gas wells inspector for Ontario, celebrated his ninety-first birthday on August 12 by banqueting some 50 friends at the Canton Inn at Petrolia, Ontario. The gathering included men who had visited practically every country in the world in their work as oil operators or drillers.

JAMES A. MOFFETT, formerly a vice president of the Standard Oil Company of New Jersey and later the Standard Oil Company of California, plans to re-enter the oil business as soon as he is relieved of his duties as Federal Housing Administrator, according to a statement made last week. Accompanied by MRS. MOFFETT he returned Thursday from a European vacation trip. He resigned as vice president of the California Standard last week to accept the appointment with the Government. Earlier in the year PRESIDENT ROOSEVELT refused to accept his resignation.

"EXOGRAPHS", as defined by the A. S. M. E. Code, Unfired Pressure Vessel Section, are films obtained by the use of X-rays, while those obtained by the use of gamma-rays are termed "gammagraphs", both types of film being generally termed "radiographs".

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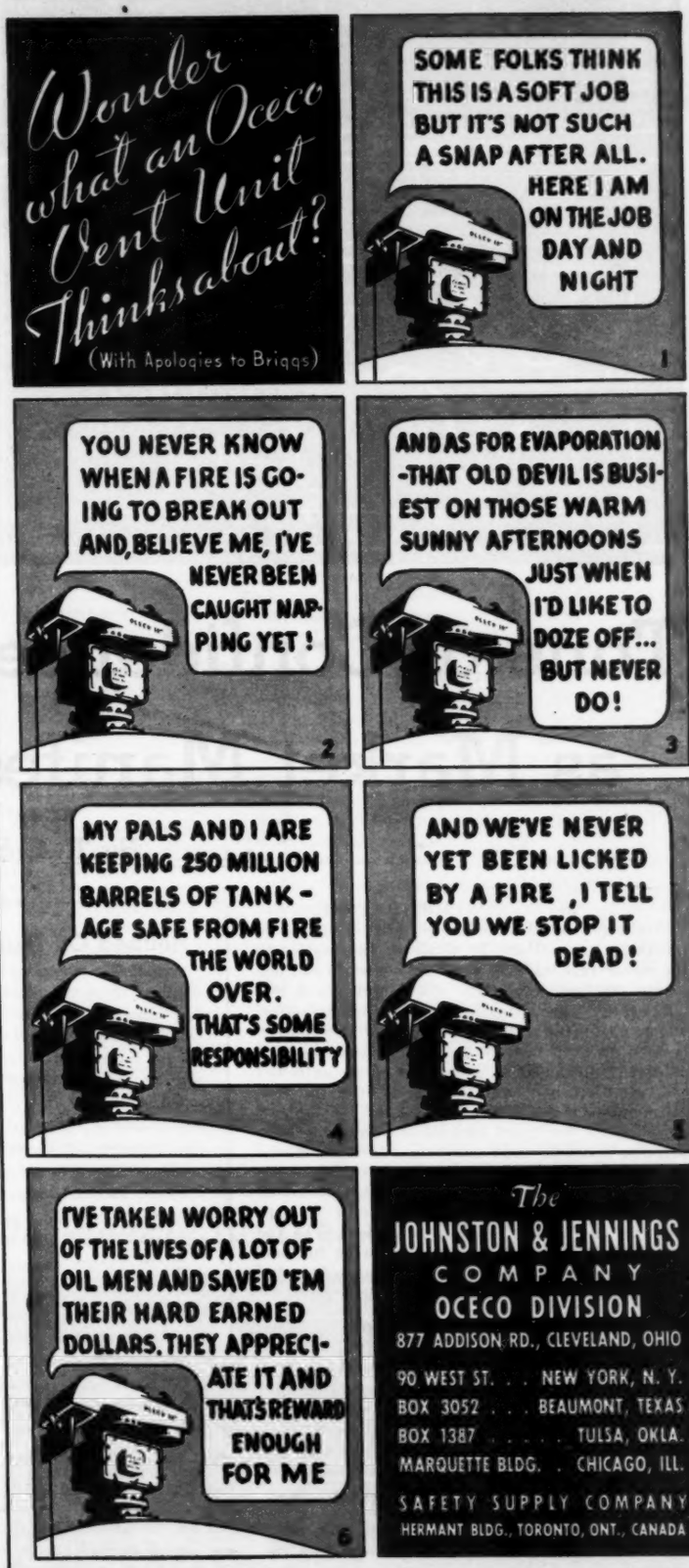
Wonder what an Oceco Vent Unit Thinks about?
(With Apologies to Briggs)
SOME FOLKS THINK THIS IS A SOFT JOB BUT IT'S NOT SUCH A SNAP AFTER ALL. HERE I AM ON THE JOB DAY AND NIGHT
1
YOU NEVER KNOW WHEN A FIRE IS GOING TO BREAK OUT AND, BELIEVE ME, I'VE NEVER BEEN CAUGHT NAPPING YET!
2
AND AS FOR EVAPORATION -THAT OLD DEVIL IS BUSIEST ON THOSE WARM SUNNY AFTERNOONS JUST WHEN I'D LIKE TO DOZE OFF... BUT NEVER DO!
3
MY PALS AND I ARE KEEPING 250 MILLION BARRELS OF TANKAGE SAFE FROM FIRE THE WORLD OVER. THAT'S SOME RESPONSIBILITY
4
AND WE'VE NEVER YET BEEN LICKED BY A FIRE, I TELL YOU WE STOP IT DEAD!
5
I'VE TAKEN WORRY OUT OF THE LIVES OF A LOT OF OIL MEN AND SAVED 'EM THEIR HARD EARNED DOLLARS. THEY APPRECIATE IT AND THAT'S REWARD ENOUGH FOR ME
6

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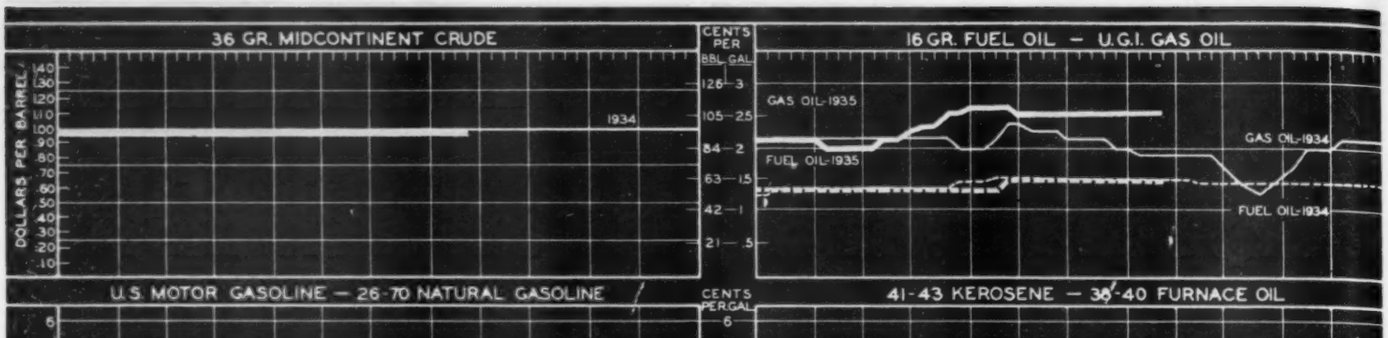


Tone of Confidence Pervades Group 3 as Market Manifests New Strength

By T. F. SMILEY

A CONFIDENT TONE PERVADED most sections of the refined oil market in the Oklahoma (Group 3) territory this week. In the motor fuel, natural gasoline, kerosene and distillate divisions especially a cheerful mood was noticeable. The spanking demand for gasoline, which has taken care of current refinery output besides drawing heavily on storage, gave no sign of drying up, and less uneasiness was manifested over what will happen to the market after the peak consumption closes a few weeks later.

Some of the more enthusiastic refiners have urged a boost in tank car prices because of the readiness with which offerings have been absorbed. The more conservatively minded counseled against such action, declaring the best way to preserve the present healthy conditions was for every refiner carefully to avoid allowing his output to overshoot consumer demand and to keep his inventories down to the lowest possible point.

Orderly Market a Lesson

Mid-Continent refiners have seen an orderly market in operation so long now, cognizant in the meantime it was the result of co-operation and wise planning, that a steadily diminishing number of them feel disposed to fling monkey-wrenches.

As a climax to an excellent gasoline season the Labor Day holiday is expected to chalk up a high consumption record. Along with the motor excursions always attending the suspension of business for at least two days there will be the customary heightened use of the automobile involved in the movement of students from vacation resorts and their return to school and college.

Among conditions indicating there will not be an abrupt end of the heavy gasoline consuming season this year is the increase in city driving, which promises to go far toward compensating for the loss of the summer tourist business. In the larger cities the smart rise in the daily use of the automobile is reported fairly startling. It is accounted for not only by the buying of new cars, but by the upward trend of general business, the decline in unemployment and a sufficient return of good times in the average home to prompt much more free use of the family car.

Natural gasoline continued to gather strength, with price ascensions throughout the list. The crisp character of the market was reported to be based on actual scarcity of material. Significant of the paucity of supplies was the case of one buyer who was said to have combed Oklahoma for 50 cars of 18-pound natural. Eventually he landed 25 cars, but he was obliged to pay a premium for it. This grade of stabilized natural in a normal market costs 20 per cent more than the 26-70. The buyer in question is reported to have paid 25 per cent more.

Contraction of the total supply of natural gasoline resulting from the shutting in of natural gas wells in the Panhandle Field of Texas has played a part in the creation of a more vigorous natural gasoline market. Of interest in this connection is the fact that until October 1 sweet gas only is affected by the state's new conservation law. After that date sour gas, or gas with a sulphur content, will come within its prescription. In view of the curtailed output of natural already resulting from the law, there is speculation as to the effect of the further shrinkage which inevitably will be witnessed when the law becomes fully effective. Incidentally this additional diminution of supply from the Panhandle will come right at the time of highest demand for natural gasoline.

Kerosene and Distillate Tight

Scarcity of kerosene and distillates was apparent in the tighter market in both the Group 3 and northern areas. One reason for this scarcity is seen in the reduced production of these materials in East Texas. At the present time about 500,000 gallons of kerosene and about the same quantity of distillates are being moved weekly out of East Texas. This compares with 664,000 gallons of kerosene and 1,248,000 gallons of distillates shipped from there in the week ending August 29, 1934.

Substantial movement of lubricants was reported. While a large part of this was accounted for by inter-refinery buying, there was brisk jobber business also. Wax was looking a little better, but there will have to be still more active demand to pry prices upward. There were reported to be no accumulations of wax of consequence.

Refined Oil Market Barometer

Thoughtful men in the refining and marketing divisions of the oil industry are turning attention to preservation of the improved conditions which have prevailed throughout important areas during the summer season now closing. Belief is expressed that the prospective new marketing code, along with voluntary restriction of output and continuance of interrefinery buying, will provide the stabilized market hoped for.

MID-CONTINENT. Gasoline steady. Naturals buoyant. Burning oils firm.

EAST COAST. Fuel oil weakening. Gasoline movement heavy. Wax improving.

GULF COAST. General market colorless. No price changes.

PENNSYLVANIA. Gasoline weak. Heavy lubricant movement making tight market.

CALIFORNIA. Excessive crude production jeopardizing price structure. Lubricants down.

CHICAGO. Gasoline strong and demand heavy. Burning oils firm and active.

Residual Fuel Oil Prices at Gulf Coast and Atlantic Ports Reduced Again

By C. O. WILLSON

NEW YORK, Aug. 19.—The most important price change of the past week in eastern refined markets was another 10-cent per barrel reduction in residual fuel oil prices effective August 15, and applying to most terminal points at the Gulf and along the Atlantic Seaboard. This follows a similar reduction on July 11.

The new prices per barrel at New York, Baltimore and Norfolk, Va., are: Bunker C fuel oil, 95 cents; Bunker B, $1.05, and 18 plus fuel oil (No. 5 fuel oil), $1.15. The prices at Charleston are 5 cents less than these quotations. Other quotations on Bunker C are: 95 cents at Portland, Me., Philadelphia, Boston and Providence; 90 cents at Savannah, Ga., Jacksonville, Fla., Port Tampa, Fla., and Sabine, Tex.

The new price of 95 cents for Bunker C fuel oil in New York Harbor marks a return to the price level in effect two years ago when the quotation was advanced from 85 to 95 cents on August 24, 1933. The market at that time was in the midst of an advancing period which carried it from a low of 60 cents in the fall of 1931 to a high of $1.30 in March of last year.

In this connection those in close touch with fuel oil markets along the Atlantic Seaboard have pointed to reports of the Bureau of Mines and the weekly releases of the American Petroleum Institute as indicating weakness in the fuel oil situation. The latest bureau report covers June operations and gives stocks as of July 1. This report for the East Coast is as follows:

EAST COAST REFINERY OPERATIONS

(Data in barrels)

Output

	June, 1935	June, 1934	May, 1935
Crude runs to stills	473,200	476,966	475,130
Gasoline	5,876,000	5,284,000	6,123,000
Kerosene	737,000	776,000	733,000
Gas oil and distillate	1,624,000	1,628,000	1,441,000
Residual fuel oils	3,532,000	3,971,000	4,003,000
Lubricants	590,000	570,000	621,000
Wax (pounds)	13,720,000	18,480,000	17,920,000
Coke (tons)	13,200	13,000	12,000
Asphalt (tons)	156,600	146,400	143,000

Stocks

Total gasoline	17,605,000	16,410,000	18,217,000
Kerosene	2,247,000	1,512,000	1,940,000
Gas oil and distillate	4,574,000	3,339,000	3,701,000
Residual fuel oils	6,604,000	5,904,000	6,136,000
Lubricants	2,161,000	2,072,000	2,256,000
Wax (pounds):			
Crude scale	27,235,000	21,117,000	26,477,000
Refined	27,328,000	25,609,000	30,646,000
Coke (tons)	24,300	18,600	18,000
Asphalt (tons)	122,300	119,400	121,700

This report shows that stocks of residual fuel oils increased in June at eastern refineries. The same general situation applied to the entire country reflecting a change in conditions in recent months. Early in the year the demand for fuel oil and gas oil far exceeded the supply and there were substantial withdrawals from storage. This was particularly true in February and March. Later in the spring the demand slowed up and with an increase in supply the statistical situation showed a return to increased inventories.

On a slightly different statistical basis the A.P.I. weekly reports show this same situation and bring the available information up to date. The following table gives the stocks of fuel oil and gas oil as of May 18 when inventories started to increase and August 10 the latest date available (data in barrels):

	August 10	May 18
East Coast	12,663,000	9,307,000
Texas Gulf	11,410,000	8,849,000
Louisiana Gulf	4,146,000	3,255,000
California	64,546,000	63,310,000
Total United States	106,446,000	96,630,000

This shows that stocks of fuel oil and gas oil in the United States increased 9,816,000 bbls. in less than two months and of this total 6,808,000 bbls. are accounted for by the increased inventories at East Coast and Texas and Louisiana Gulf refineries and 1,200,000 bbls. in California. This shows that practically all of the increase has been in coastal areas in the United States with little change at interior refineries.

The only weakness that has developed in prices appears to be in the Gulf and Atlantic Seaboard sections. California operators have greatly reduced their stocks from what they were a few years ago and are enjoying a steady domestic and export demand at this time. The larger factors there are quoting 95 cents San Pedro for Bunker C so that the top prices are now the same as the New York Harbor quotations and higher than the Gulf Coast.

Market students find it difficult to analyze all the factors which affect the fuel oil market at the Gulf and Atlantic Coast points. Weakness usually develops first at the Gulf and is reflected immediately in the coastwise movement. The market is influenced by the output of domestic refineries and large West Indies refineries, the material imported under bond for foreign ships and finally the output of European refineries. The latter situation has been changed somewhat by the large Iraq production now available to European refineries.

Those in closest touch with this market believe that conditions in regard to the transatlantic shipping trade and other markets outside the United States have had more to do with the price reductions in fuel oil than have domestic conditions. The industrial domestic demand at points served by Gulf Coast and East Coast sellers appears to be as heavy as it was a year ago. Competition has been keen in the Marine end, however, and the 21-cent import tax on crude oil and fuel oil has brought considerable shifting in the movement of residual oil with foreign sellers occupying a stronger position than do the domestic refiners in sales outside the United States.

Although the price decline in Bunker fuels may prove to be of short duration, at present it is pointed to as part of the evidence indicating weakness in the general oil situation. It also emphasizes the desirability of curtailing supplies. A low priced market for residual fuels if it continues will make it more difficult to maintain profitable prices on overhead distillates and gas oils with a direct relationship to gasoline due to the fact that all these fuel products are potential sources of motor fuel supply through the cracking processes.

Other Products

Tank car quotations on gasoline at coastal terminals in this territory are unchanged. The movement is heavy. The Gulf market does not appear as strong both for foreign and coastwise movement. Export quotations are fractionally lower and cargoes of middle and 65 octane material have been offered coastwise at lower prices. Most sellers at the Gulf are continuing to quote from 5⅝ to 5½ cents for 60 to 65 octane material.

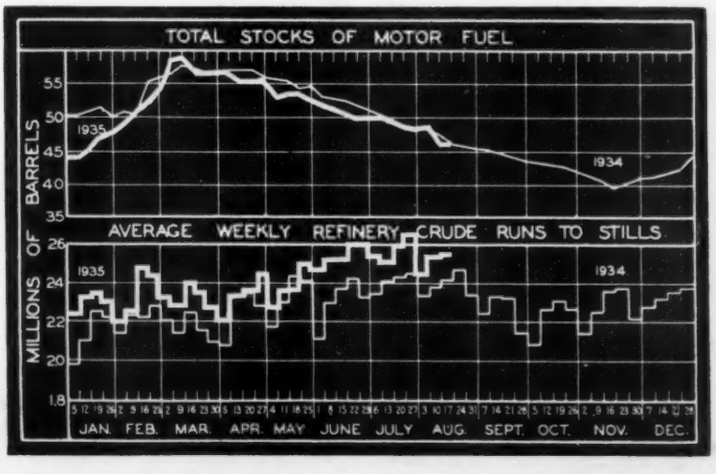
The lower bunker prices in this territory up to this writing had not been reflected in reductions on domestic quotations for furnace oils, gas oils and Diesel fuels. It was thought that the Diesel price of $1.65 to the marine trade might be lowered and predictions of gas oil quotations under 4 cents were heard in the tank car market. The furnace oil prices range from 3½ cents for No. 4 to 5 cents for the No. 1 with the seasonal pickup in demand not yet under way. Kerosene was slightly more active with no changes in prices.

The demand for crude scale wax has improved and it is believed that this market which has been inactive around 2 cents per pound for several weeks will show improvement.

American Petroleum Institute Weekly Refinery Statistics

Week Ending August 17, 1935

	Capacity reporting per cent	Daily crude runs (bbls.)	Finished motor fuel (bbls.)	Gas oil and fuel oil (bbls.)
East Coast	100.0	490,000	14,746,000	12,879,000
Appalachian	94.8	107,000	2,101,000	851,000
Indiana, Illinois, Kentucky	95.9	369,000	8,537,000	5,265,000
Okla., Kans., Mo.	84.8	290,000	4,615,000	4,865,000
Inland Texas	48.5	98,000	1,090,000	1,670,000
Texas Gulf	96.4	536,000	4,532,000	11,388,000
Louisiana Gulf	96.4	109,000	1,074,000	4,039,000
N. Louisiana and Ark.	90.0	44,000	278,000	412,000
Rocky Mountain	61.9	47,000	624,000	773,000
California	92.6	470,000	8,101,000	64,172,000
Total United States	89.5	2,560,000	45,698,000	106,314,000



Market Record of Active Oil Stocks Listed on New York Stock Exchange

Compiled by Carl H. Pforsheimer Co., 25 Broad Street, New York City, Members New York Stock Exchange and New York Curb Exchange

1935 High	1935 Low	Week ended Aug. 17 Sales	High	Low	Close	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	Dividends paid in 1934	1934 High	1934 Low	1933 High	1933 Low
70¾	42½	4,400	68¾	66¼	68½	Amerada Corp.	788,675	N.P.	50cQ	7-31-35	$2.00	55⅝	39	47⅝	18½
28	21⅜	16,500	25¼	24¼	24½	Atlantic Refining	2,673,834	$25	25cQ	9-16-35	1.00	35¼	21½	32½	12⅝
10⅝	5⅞	42,300	9⅞	8⅞	9¾	Barnsdall Corp. A	2,195,397	$5	....	5-11-31	....	10	5⅞	11	3
14	3⅜	199,700	14	10⅝	13⅞	Columbia Gas & Elec.	11,610,036	N.P.	....	5-15-34	‡ .25	19¼	6⅝	28⅛	9
10½	6½	115,100	9¾	8⅝	9⅝	Consolidated Oil Corp.	13,996,072	N.P.	14c	10-31-34	.42	14¼	7¼	15¾	5
23	15⅛	35,700	22¼	21⅛	22	Continental Oil of Delaware	4,738,593	$5	25c	7-31-35	.50	22¾	15¾	19⅝	4⅞
20⅝	11⅜	15,500	20½	18¾	20½	General Asphalt	387,149	$10	....	6-15-32	....	23½	12	27	4⅝
3½	1½	12,700	3½	2¾	3½	Houston Oil (new)	1,098,618	$25	....	10-17-30	....	5⅝	2½	7⅝	1⅞
1⅞	⅜	7,600	⅞	⅝	¾	Louisiana Oil Refining	1,302,158	N.P.	....	.....	....	3⅜	¾	4	⅝
13⅞	9½	14,400	11⅜	10⅝	11¼	Mid-Continent Petroleum	1,857,912	$10	15c	5-15-35	.50	14¾	9⅛	16	3⅝
20⅞	9	13,800	20⅞	16	20⅞	National Supply of Delaware	382,501	$25	....	5-15-31	....	21⅛	10	28⅝	4
14⅛	9¼	16,600	11⅞	10⅞	11⅝	Ohio Oil Co.	6,563,377	N.P.	15c	6-15-35	.45	15⅞	8½	17⅝	4¾
10⅞	6¾	18,300	10¾	8⅞	10¾	Pacific Western Oil	1,000,000	N.P.	40c	11-30-34	.40	9⅜	5½	9½	3
1⅜	½	1,300	1	⅞	1	Panhandle P. & R.	198,770	N.P.	....	.....	....	2½	⅝	4¼	⅝
26¼	13¾	66,100	26⅝	23¼	26½	Phillips Petroleum	4,154,687	N.P.	25c	8-30-35	1.00	20¾	13⅝	18¾	4¾
11⅝	6½	11,100	10½	9⅜	10⅜	Plymouth Oil Co.	1,050,000	$5	25c	3-30-35	75c & 4% Stk.	16¾	7¼	17⅝	6¾
10⅛	5⅞	15,400	9⅝	8⅞	9⅛	Pure Oil Co.	3,038,370	N.P.	....	9-1-30	....	14⅞	6⅛	15⅝	2½
44⅜	29½	800	44⅜	44	44⅜	Royal Dutch N. Y. shares	fl. 503,642,000	fl. 100	$1.70	8-1-35	1.35	39½	28⅝	39¾	17⅝
35⅞	20¾	7,400	32¾	30½	31⅞	Seaboard Oil of Delaware	1,244,283	N.P.	15cQ†	9-15-35	1.00	38⅝	20¾	43⅜	15
11½	5½	18,500	11¼	10⅜	10¾	Shell Union Oil	13,070,625	N.P.	....	6-30-30	....	11½	6	11⅝	4
98½	63⅛	900	98½	96¾	97½	Shell Union Oil pfd.	400,000	$100	....	7-1-31	....	89	57	61	28½
18¾	5	6,500	6¾	6⅛	6⅜	Simms Petroleum	461,698	$10	$10 liq.	7-5-35	.55	17⅛	7¼	12⅜	4⅞
11⅜	6½	2,300	11	9¾	11	Skelly Oil	1,008,514	$25	....	12-15-30	....	11½	6	9⅞	3
15⅜	11	47,900	12⅜	11⅞	12⅛	Socony-Vacuum	31,019,694	$25	15cSA	9-15-35	.60	19⅞	12½	17	6
38⅞	27¾	17,400	36	34½	35	Standard Oil of California	13,102,900	N.P.	25c	9-18-35	1.00	42⅞	26½	45	19½
28	23	27,200	28	26⅝	27⅜	Standard Oil (Indiana)	15,215,677	$25	25cQ	6-15-35	1.00	32⅜	23¼	34	17
..	..	No sales	..	..	..	Standard Oil of Kansas	200,000	$10	50cQ	10-31-34	2.00	41	26	39⅞	12¾
50½	35¾	30,600	47⅝	46½	47	Standard Oil of New Jersey	25,856,081	$25	50cSA‖	6-15-35	1.25	50⅛	39¼	47½	22¾
75½	60½	1,200	68½	65	68½	Sun Oil	1,733,013	N.P.	25cQ	9-16-35	$1 & 9% Stk.	74¼	51½	59	35
23¾	16½	43,800	21¼	20¼	20½	Texas Corp.	9,486,417	$25	25cQ	7-1-35	1.00	29⅝	19⅝	30⅛	10¾
8⅜	3¼	91,400	8⅜	6¼	7⅞	Texas Pacific Coal & Oil	880,703	$10	....	12-31-29	....	6½	2½	6½	1⅜
12	7⅝	17,800	10¾	10⅛	10⅜	Tide Water Associated	5,618,672	N.P.	25cQ	9-6-35	....	14⅜	8	11¾	3⅛
103⅝	84	1,600	103⅝	100	103⅝	Tide Water Associated pfd.	666,524	$100	$3‖	7-1-35	$8.50	87	64½	65¼	23½
20⅛	14¾	8,400	18⅝	18	18⅝	Union Oil of California	4,386,070	$25	25cQ	5-10-35	1.00	20½	11½	23⅜	8½
26½	20⅞	1,900	24½	22¾	22¾	Union Tank Car Co.	1,200,000	N.P.	30cQ	6-1-35	1.20	25¾	15⅝	22⅝	10½
2⅝	1	600	2⅛	2	2	Wilcox Oil & Gas	424,839	$5	....	5-10-28	....	5¾	2	5½	2

*Ex-dividend. †Plus extras. ‡Payable in preferred stock. §On account of accumulated and current dividends. ‖Dividend 4/75 Mission Corp. paid 3-15-35. ¶Dividend of one-half share Barnsdall Refining Corp

Market Record of Active Oil Stocks Listed on New York Curb

Compiled by Carl H. Pforsheimer Co., 25 Broad Street, New York City, Members New York Stock Exchange and New York Curb Exchange

1935 High	1935 Low	Week ended Aug. 17 Sales	High	Low	Close	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	Dividends paid in 1934	1934 High	1934 Low	1933 High	1933 Low
42	30½	600	41¼	41	41	Buckeye Pipe Line Co.	200,000	$50	75cQ	6-15-35	$3.00	38	26	39¾	25
4¼	1⅝	4,600	3⅛	2¾	2⅞	Carib Syndicate	799,020	25c	....	.....	....	5½	1½	7¾	¼
157	115	No sales	..	..	..	Chesebrough Mfg. Co.	120,000	$25	$1Q†	9-28-35	11.50	150	116	129	71
2⅞	⅜	341,200	2⅞	2⅛	2⅞	Cities Service	37,804,394	N.P.	....	6-1-32	....	4¼	1⅛	6½	1⅓
1¼	½	1,900	ⅱ	¾	ⅱ	Colon Oil	2,200,000	N.P.	....	.....	....	3¼	½	4	¼
¾	¼	2,600	$\frac{7}{32}$	¾	$\frac{7}{32}$	Cosden Oil	399,687	$1	....	.....	....	3⅞	½	3⅞	1⅜
18⅞	10	19,900	18	16¾	17⅞	Creole Petroleum	6,974,356	$5	....	.....	....	14⅜	9⅝	12	4⅜
6⅝	4¼	100	5⅛	5⅛	5⅛	Darby Petroleum	509,696	$5	25c	7-15-35	.50	7½	4⅛	8	2⅛
2	¾	200	1½	1½	1½	Derby Oil & Refining	263,162	N.P.	....	.....	....	2¼	1	2¾	⅞
38	33¼	50	36	36	36	Eureka Pipe Line	50,000	$50	$1Q	8-1-35	4.00	37	30	41¾	20
74⅜	50¼	7,700	64⅞	63	64	Gulf Oil Corp.	4,538,101	$25	....	10-1-31	....	76¾	49⅜	62	24
64	44	4,100	59⅝	58	59	Humble Oil & Refining (new)	8,923,935	N.P.	25cQ	7-1-35	¶1.25	49½	33¼	105½	40
22½	15⅜	19,900	20⅝	18⅞	20¼	Imperial Oil of Canada	26,919,871	N.P.	25cSA†‡	6-1-35	.92½	17⅞	12⅝	15⅞	6½
6	3⅝	600	5½	5¼	5¼	Indiana Pipe Line	300,000	$10	15cSA	5-15-35	.35	6⅞	3⅝	8	3⅛
39¾	28	26,000	37⅜	33¾	37½	International Petroleum	14,247,088	N.P.	75cSA†‡	6-1-35	2.28	33⅜	19⅝	23½	8⅝
9½	4⅜	21,500	8⅞	8⅛	8½	Louisiana Land & Exp.	3,000,000	N.P.	....	.....	....	5	2⅛	2¼	$\frac{7}{32}$
6⅜	3½	600	4⅜	4	4	Lion Oil Refining	270,000	N.P.	....	10-27-30	....	6	3⅝	9½	1¼
8⅜	4½	4,900	8⅜	7⅜	8⅜	Lone Star Gas	5,382,723	N.P.	15c	8-15-35	‖ .16	8⅝	4¼	11⅞	4⅝
5½	4⅛	1,600	5¼	5	5⅛	Mountain Producers	1,682,182	$10	15cQ	7-1-35	.60	5½	4	6½	2⅓
18⅝	11⅜	2,400	18	17⅜	17⅞	National Fuel Gas	3,810,183	N.P.	25cQ	7-15-35	1.00	18⅛	13⅛	20	10
10½	6¾	200	10⅛	10⅛	10⅛	National Transit	509,000	$12.50	40c8A	6-15-35	.75	9½	7	10	5½
2½	2	900	2½	2¼	2¼	New Bradford Oil	1,445,202	$5	10c8A	9-16-35	.20	2½	1¾	2⅛	½
2¼	1	No sales	..	..	..	New Mexico and Arizona	1,000,000	$1	....	.....	....	2¾	1	1⅞	½
4½	3	100	4½	4¼	4¼	New York Transit	100,000	$5	15c8A	4-15-35	.30	4⅝	3	4⅞	3
7	5¼	300	6½	6⅜	6½	Northern Pipe Line	120,000	$10	25c8A	7-1-35	.50	7	4⅝	6⅛	4¼
2⅛	1¼	8,600	2	1⅝	1⅝	Pantepec Oil	1,608,700	N.P.	....	.....	....	2⅝	⅞	3⅜	½
1½	⅝	2,200	1⅜	1	1⅜	Ryan Consolidated	296,931	N.P.	....	.....	....	3⅜	⅞	4¼	⅝
7½	5½	2,700	7⅛	7	7	Salt Creek Producers	1,496,859	$10	20cQ	8-1-35	.80	7⅞	5½	9¼	3½
28⅜	21⅝	2,600	23⅝	22⅛	23⅛	South Penn Oil	1,200,000	$25	30cQ	6-29-35	1.20	26½	17½	22⅛	11
4⅝	3⅞	No sales	..	..	..	Southern Pipe Line	100,000	$10	15c8A	9-3-35	.25	5½	3½	6	2⅛
52½	45¼	50	49⅞	49⅞	49⅞	Southwest Penna. Pipe Lines	35,000	$50	$1Q	7-1-35	5.00	47	41	43	24½
28	10¼	1,700	21⅜	21	21	Standard Oil of Kentucky	2,604,790	$10	25cQ†	3-15-35	1.50	18⅜	14⅝	19¼	8⅝
12	7⅜	600	11	11	11	Standard Oil of Nebraska	188,403	$25	....	6-20-34	.50	16⅞	8¼	20½	11
19⅜	11½	2,000	15½	15	15¼	Standard Oil of Ohio	753,740	$25	....	1-3-33	....	28½	12¼	41	15½
1½	⅞	3,600	1¼	1⅛	1⅛	Sunray Oil	1,610,810	$1	....	4-15-31	....	2	ⅱ	1½	¼
6⅞	5	2,100	6½	5⅝	6¼	Texon Oil & Land	336,028	N.P.	15cQ	6-29-35	.90	11	4⅝	13¾	6¼

*Ex-dividend. †Plus extras. ‡Payable in Canadian funds. §Includes 50 cents on old $25 par value stock. ‖Payable in preferred stock.

Note—In comparing highs and lows for the several years in the two tables, it will be necessary to take into consideration cases where there have been stock split-ups.

PRICES ON REFINED PRODUCTS

All quotations f.o.b. plant in cars for interstate or export movement except as otherwise noted

Prices as of August 20, 1935

The following quotations are exclusive of the federal excise taxes of 1 cent a gallon on gasoline and 4 cents on lubricating oils.

Refinery Gasoline

OKLAHOMA (Group 3)—

U. S. Motor grades:		
Below 63 octane	.04¾	.04⅞
63-70 octane	.05⅝	.05¾
60-62 400 grade:		
Below 63 octane	.04¾	.04⅞
63-70 octane	.05⅝	.05¾
64-66 375	.04⅞	.05
68-70 360	.05	.05⅛

NORTH TEXAS—

U. S. Motor grades:		
Below 63 octane	.04¾	.04⅞
63-70 octane	.05⅝	.05¾
60-62 400	.04¾	.04⅞
64-66 375	.04⅞	.05

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—

U. S. Motor grades:		
Below 63 octane		.05½
63-70 octane		.06¼
60-62 400		.05½

ARKANSAS (Ark., N. La., Miss. del.)—

U. S. Motor grades:	
Below 63 octane	.05½
63-70 octane	.06¼

CHICAGO (based on Group 3)—

U. S. Motor grades:		
Below 63 octane	.04¾	.04⅞
63-70 octane	.05⅝	.05¾
60-62 400	.04¾	.04⅞
64-66 375	.04⅞	.05
68-70 360	.05	.05⅛
Aviation fighting grade	.05¾	.06

PENNSYLVANIA (inland refineries)—

58-60 U. S. Motor:	
Below 60 octane	.05⅝
60-64.9	.06⅝
65-70 octane	.06⅞
64-66 375	.06
68-70 350	.06¼

CALIFORNIA (domestic movement)—

54-58 U. S. Motor	.04¼	.05¼
58-60 400	.05	.06

EAST COAST—

U. S. Motor, below 60 octane:	
*New York (Bayonne)	.05⅝
Baltimore	.05⅝
U. S. Motor, 60-64.9 octane:	
*New York (Bayonne)	.06
Philadelphia	.06
Boston	.06
Baltimore	.06
Charleston, S. C.	.06
U. S. Motor, 65 and above:	
*New York (Bayonne)	.06¼
Philadelphia	.06⅜
Boston	.06⅜
Baltimore	.06⅜
Charleston, S. C.	.06¼

*All grades of gasoline one-fourth cent less for small barge shipments.

GULF COAST (domestic)—

U. S. Motor grades:		
Below 60 octane	.05	.05⅛
60-64.9	.05⅛	.05⅛
65 octane and higher		.05⅛

Naphtha

PENNSYLVANIA (inland refineries)—

50-52 450 (blending)	.05⅛
52-54 450 (blending)	.05⅛
54-56 450 (blending)	.05⅝

CHICAGO (based on Group 3)—

50-52 450 (blending)	.04¾	.05
Cleaners' naphtha, 56-58 gr., 200 i.b.p., 320 e.p.	.06¾	.07
Lacquer diluent, 180 i.b.p., 250 e.p.	.07⅞	.08
Lacquer diluent, 140 i.b.p., 200 e.p.	.08⅜	.09
Rubber solvent, 68-70 gr., 100 i.b.p., 300 e.p.	.06⅞	.07
Stoddard solvent, 300 i.b.p., 410 e.p., over 82° flash	.06⅝	.06⅛
Pet. thinner, 200-300 i.b.p., 410 e.p., over 83° flash	.06⅝	.06⅛
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p., 320 e.p.	.06⅞	.07
Petroleum spirits	.05⅞	.06

Natural Gasoline

OKLAHOMA (Group 3)—

Grade 26-70		.03⅝
Grade 18-55	.04½	.04⅝
Low vapor pressure grade:		
14 lb. v.p. (max.)	.05⅛	.05¼
12 lb. v.p. (max.)	.05¼	.05½

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—

Grade 26-70	.03⅝

NORTH TEXAS—

Grade 26-70	.03½	.03⅝
Grade 18-55		.04¼
Low vapor pressure grade:		
14 lb. v.p. (max.)	.04¾	.04⅞
12 lb. v.p. (max.)	.05⅛	.05¼

CALIFORNIA—

75-85 375-390	.04¾	.05½

Kerosene

(All kerosene water white)

OKLAHOMA (Group 3)—

41-43	.03⅝	.03½
42-44	.03½	.03¾

NORTH TEXAS—

41-43	.03¼

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—

41-43	.03¾

ARKANSAS (Ark., N. La., Miss. del.)—

41-43	.03⅝

PENNSYLVANIA (inland refineries)—

45	.04½
46	.04⅝
47	.04¾

CHICAGO (based on Group 3)—

41-43	.03⅜	.03⅝
42-44	.03½	.03¾

CALIFORNIA (Pac. Coast market)—

38-40 high burning test	.03¼	.03½

NEW YORK (Bayonne, N. J.)—

41-43	.04⅞	.05

GULF COAST (domestic)—

41-43	.04¼	.04½

Petroleum Coke

(Prices per ton f.o.b. refineries in Chicago area. Refineries absorb freight to 80 cents a ton.)

Pile run	6.00
Direct from still	7.00
Egg, nut, pea	8.00
Lump	8.50

Furnace Oil

OKLAHOMA (Group 3)—

No. 1 prime white, 38-42	.03½	.03⅝
No. 1 straw, 38-40	.03	.03⅛
No. 2 straw, 32-36	.02¾	.03
No. 2 dark, 32-36	.02⅝	.02⅞
No. 3, 28-32	.02½	.02⅝
No. 3, 15 and above, 28-32	.02⅜	.02½

NORTH TEXAS—

No. 1 prime white, 38-42	.03½	.03⅝
No. 1 straw, 38-40	.03	.03⅛

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—

No. 2, 32-36	.03½	.03¼

ARKANSAS (Ark., N. La., Miss. del.)—

No. 2, 32-36		.03½
No. 3, 28-32		.03¼

CHICAGO (based on Group 3)—

No. 1 prime white, 38-40	.03½	.03¼
No. 1 straw, 38-40	.03	.03⅛
No. 2 straw, 32-36	.02¾	.03
No. 2 dark, 32-36	.02¾	.02⅞
No. 3, zero to 15, 28-32	.02½	.02⅝
No. 3, 15 and above, 28-32	.02¼	.02⅜

NEW YORK (Bayonne, N. J.)—

No. 1	.04⅞	.05
No. 2	.03⅞	.04
No. 4	.03½	.03⅝

Gas Oil and Fuel Oil

(Gas oil per gal., fuel oil per bbl.)

OKLAHOMA (Group 3)—

U.G.I. gas oil	.02⅛	.02⅜
No. 4, 24-28	.87½	.90
No. 4, 15 and above, 24-28	.75	.80
No. 5	.70	.75
No. 6	.67½	.70
Below 18 fuel oil, industrial	.65	.67½

NORTH TEXAS—

U.G.I. gas oil	.02⅛	.02⅜
No. 4, 24-28	.87½	.90
No. 5	.72½	.75
No. 6	.67½	.70
Below 18 fuel oil, industrial	.65	.67½

NORTH LOUISIANA (Ark., N. La. and Miss. delivery)—

U.G.I. gas oil	.02⅝	.02¾
10-14 fuel oil, industrial	.75	.80

ARKANSAS (Ark., N. La., Miss. del.)—

10-14 fuel oil, industrial	.60	.65

CHICAGO (based on Group 3)—

U.G.I. gas oil	.02⅜	.02½
No. 4, 24-28	.85	.90
No. 4, 15 and above, 24-28	.72½	.77½
No. 5, 18-22	.65	.70
No. 6, 10-16	.55	.60

Fuel oils of more than 40 cold test generally 5 to 15 cents per bbl. in these areas.

PENNSYLVANIA (inland refineries)—

36-40		.04½

CALIFORNIA—

Los Angeles:

30-34 gas oil, per bbl.	1.05	1.25
27 plus Diesel	1.05	1.25
27 plus Diesel (bunkers)	1.25	1.30
12-16 (bunkers at tidewater)	.87	.95
10-16 (cargo lots)	.75	.92
12-17 (tank cars)	.60	.95
San Joaquin Valley:		
10-18 (tank cars)	.55	.75
San Francisco:		
27 plus Diesel, per bbl.		1.25
27 plus Diesel (bunkers)		1.35
10-16 (bunkers)		1.00

GULF COAST—

28-30 gas oil	.03½	.03⅝
28-30 Diesel (bunkers)		1.70
Bunker C (bulk cargoes)	.85	.90
Bunker C (bunkers)	.95	1.00

NEW YORK (Bayonne, N. J.)—

27 plus, gas oil	.04
28-30 Diesel (lighterage 6½ cents per bbl.)	1.65
28-30 Diesel (tank cars)	.04
*Bunker C (to ocean going ships in N. Y. harbor)	.95
Industrial fuel (tank cars)	.03⅝

*Lighterage charge 5 cents per barrel additional.

Neutral Oil

(Vis. at 100° F. except Pennsylvania and color N.P.A.)

OKLAHOMA (Group 3)—

Zero to 10 Cold Test:		
150-3		.10
180-3		.11¼
180-4		.10⅝
200-3		.11⅝
200-4		.11¼
240-3		.13⅝
240-4		.13¼
280-3		.14⅝
280-4		.14
300-3½		.15¼
400-4		.17¼
100-2 paraffin oil		.05⅝
15-20 Cold Test:		
200-3		.10⅝
200-4		.10¼
240-3		.12⅝
240-4		.12¼
280-3		.13⅝
280-4		.13

GULF COAST—

Pale Oils:		
200-3	.07	.07½
300-3	.07½	.08
500-3½	.08½	.09
750-3½	.09	.09¼
1,200-3½	.09½	.09⅝
2,000-4	.09⅝	.10
Red Oils:		
200-5-6	.07	.07¼
300-5-6	.07¼	.07½
500-5-6	.08	.08⅛
750	.08⅛	.09
1,200-5-6	.09¼	.09½

CALIFORNIA (moving to dom. market)

Pale Oils:		
100-2½-3	.07½	.07⅝
200-2½-3	.08	.08⅛
300-3-3½	.08⅜	.09⅜
350-3-4	.10½	.10⅝
400-3-4	.11½	.12
450-3-4	.12⅛	.12½
550-3-4	.12⅝	.13¼
600-3-4	.13¼	.13½
Red Oils:		
200-4-5	.08¼	.08⅜
300-5-6	.08⅜	.09
350-5-6	.09⅜	.10
400-5-6	.10¼	.10½
450-5-6	.10⅜	.11
500-5-6	.11	.11¼
600-5-6½	.11½	.12¼
700-6½ plus	.12½	.12⅝
750-6½ plus	.13	.13⅝
900-6½ plus	.13¾	.13⅞

PENNSYLVANIA—

150 vis. at 70° F., color, 400-405 flash:		
Zero pour test	.20½	.21
10 pour test	.19½	.20
15 pour test	.19	.19½
25 pour test	.18	.18½
180 vis. at 70° F., 3 color:		
25 pour test	.21	.21½
200 vis. at 70° F., 3 color:		
Zero pour test	.25½	.26
10 pour test	.24½	.25
15 pour test	.24	.24½
25 pour test	.23	.23½

Bright and Steam Refined

OKLAHOMA (Group 3)—

Bright Stocks:		
190-200 D		.18
150-160 D, 0-10		.15
150-160 D, 10-25		.14½
150-160 25-40		.14
150-160 E		.14
Steam refined:		
630 green (treated)		.09½
600 light green, untreated		.08½
600 dark green, untreated	.05	.06

PENNSYLVANIA—

Bright Stocks (Pennsylvania grade, No. 8 color, 145-50 at 510; 540-550 flash):

10 pour test	.20	.20½
15 pour test	.19	.19½
20 pour test	.18	.18½
25 pour test	.17	.17½
Steam refined:		
600	.09½	.10
650	.11	.11½
600 Pennsylvania flash	.12	.12½
630 flash	.17	.17½
600 Warren E filtered	.12	.13½

Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—

124-126 (a.m.p.) w.c. scale	.02	.02⅛

PENNSYLVANIA (inland refineries)—

122-124 (a.m.p.) w.c. scale		.02⅛
124-126 (a.m.p.) w.c. scale		.02⅛

NEW YORK—

Wax in bags fully refined:

123-125 (a.m.p.) wax		.0420
125-127 (a.m.p.) wax		.0430
128-130 (a.m.p.) wax		.0455
130-132 (a.m.p.) wax		.0480
133-135 (a.m.p.) wax		.0510
135-137 (a.m.p.) wax		.0535
124-126 (a.m.p.) w.s.	.0200	.0210
24-26 (a.m.p.) y.s.	.0200	.0205

Petrolatum in barrels, carload lots:

Dark green		.01⅜
Amber	.02⅜	.03
Extra amber	.03	.03¼
Lily white	.06⅝	.06¾
Snow white	.07⅜	.07⅝
Cream	.05⅝	.05¾

CHICAGO (f.o.b. switching district; carload lots in bags, add 3° for a.m.p.)

122-124 (a.s.t.m.) wax	.0440	.0450
125-127 (a.s.t.m.) wax	.0465	.0475
127-129 (a.s.t.m.) wax	.0480	.0490
*130-132 (a.s.t.m.) wax	.0520	.0530
*132-134 (a.s.t.m.) wax	.0545	.0555

*Prices applicable for wax shipped in bulk or bag.

Export Prices

GASOLINE

GULF COAST—

U. S. Motor		.04¾
60-62 400		.04⅞
61-63 390	.04⅝	.05
64-66 375		.05⅛

LOS ANGELES—

U. S. Motor grades:		
53-55 octane		.04
55-65 octane	.04	.04¼
65-67 octane	.04¼	.04⅜
67-69 octane	.04½	.04⅝
Above 69 octane	.04⅝	.05
58-60 400 endpoint	.04½	.05

KEROSENE

GULF COAST—

41-43 prime white		.03⅞
41-43 water white	.03⅞	.04
44 water white		.04¼

LOS ANGELES—

41-43 water white	.04¼	.04⅝

LUBRICANTS

NEW YORK (f.a.s. in bbls.)—

Cylinder Stocks:		
600 Warren E	.18½	.19
600 S.R. unfiltered	.16½	.17
650 S.R. unfiltered		.18
600 flash S.R.	.19	.19½
630 flash S.R.	.23	.23½
Bright Stocks:		
8 color		.24
6½ plus colors in dilution		.23

NEUTRAL OIL

200-3 color	.28	.29
150-3 color	.23	.24

PARAFFIN WAX

NEW YORK (prices per pound)—

123-125 a.m.p.	.03625
125-127 a.m.p.	.0375
128-130 a.m.p.	.0400
130-132 a.m.p.	.0425
133-135 a.m.p.	.0475
135-137 a.m.p.	.05
Crude scale:	
124-126 w.s.	.0200 .0205
124-126 y.s.	.019 .02

RETAIL OIL MARKETS

Tank wagon and filling station prices on gasoline and kerosene furnished by the larger marketing firms

Prices as of August 20, 1935

Taxes

The gasoline quotations given in the following tables include the 1-cent federal tax, as well as state, county and city taxes. The gasoline is the regular or standard grade. In most areas a third grade and a premium grade are also available.

Discounts

Under the standard form of commercial consumer contract which went into effect March 1, 1934, save in California, Oregon, Washington, Arizona and Nevada, a discount of 1 cent a gallon off tank wagon or 3 cents a gallon off retail prices is permitted for purchases between 4,000 and 10,000 gallons per month, or 4 cents a gallon off retail prices for purchases in lots of more than 10,000 gallons a month. The minimum delivery is 25 gallons.

Standard Oil Co. (Indiana)

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Chicago	15.5	17.5	4.0	9.8
Decatur, Ill.	15.5	16.5	4.0	9.8
E. St. Louis	15.2	17.2	4.0	9.5
Joliet	15.5	17.5	4.0	9.8
Peoria	15.5	15.5	4.0	9.8
Quincy	15.3	17.3	4.0	8.6
Davenport, Ia.	15.5	(†)	4.0	9.8
Des Moines	15.3	(†)	4.0	9.6
Mason City	15 7	(†)	4.0	10.0
Sioux City	15.5	(†)	4.0	9.8
Duluth, Minn.	16.3	18.3	4.0	10.6
Mankato	15.9	15.9	4.0	10.2
Minneapolis	16 9	16.9	4.0	10 2
LaCrosse, Wis.	16.9	18 9	5.0	10 2
Green Bay	17.3	19.3	5.0	10.5
Milwaukee	15.3	16.8	5.0	10.1
Madison	16.9	18.9	5.0	10.2
Detroit, Mich.	14.5	16 0	4.0	9 3
Grand Rapids	16.6	18.6	4.0	10.5
Saginaw	16.8	18.8	4.0	9.3
Evansville, Ind.	17.2	19.2	5.0	10.3
Indianapolis	17.4	19.4	5.0	10 6
South Bend	17.6	19.6	5.0	12.0
Fargo, N. Dak.	16.9	18.9	4.0	11.2
Huron, S. Dak.	17.4	19.4	5.0	10.7
Sioux Falls	16 9	18 9	5.0	10.2
Kan. City, Mo.*	14.9	16.9	4.0	9.2
Springfield	14.6	16.6	4.0	8.9
St. Louis	15.2	17.2	3.5	9.5
St. Joseph*	14.9	16 9	4 0	9.2
Wichita, Kans.	14.4	15.0	4.0	6.3
Bartlesville, Okla.	16 0	18 0	5.0	8.8

*State tax 2 cents, 1-cent city tax and 1-cent federal tax.

†Standard Oil Co. (Indiana) has leased all service stations in Iowa.

Discounts to dealers: Undivided accounts, 1½ cents on premium and regular and 2½ cents on third grade off service station prices; divided accounts one-half cent less than undivided. Discounts to dealers in metropolitan Chicago one-half cent larger than rest of Standard of Indiana territory, namely 4 cents and 3 cents on respective grades. Where prices are more than 1 cent below normal, the discounts are one-half cent less than above.

Stanolex Furnace Oil in Chicago

Effective June 27, 1935, f.o.b. Chicago tank wagon prices: Range oil, less than 100 gallons, 8.5 cents; 100-149 gallons, 7.5 cents; 150 gallons and more, 7.0 cents. No. 1 (36-40 lt. stw. zero), less than 100 gallons, 8.5 cents; 100-149 gallons, 7.5 cents; 150 gallons or more, 7.0 cents; No. 2 (30-34, stw. zero), same prices and quantities as No. 1; No. 3 (22-26, zero), less than 150 gallons, 7.2 cents; 150 gallons or more, 6.2 cents. No. 4 (12-16 zero), less than 400 gallons, 7.2 cents; 400 gallons or more, 6.2 cents, viscosity of No. 4, 85 and 100° F.; No. 5, less than 400 gallons, 5⅝ cents; 400 gallons or more 4⅝ cents.

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Denver, Colo.	18 0	20.0	5.0	11.0
Pueblo	18 0	20.0	5.0	13.0
Grand Junction	20.5	22.5	5.0	15.0
Casper, Wyo.	18.5	20.5	5.0	11.5
Cheyenne	18.5	20.5	5.0	13.0
Butte, Mont.	21.0	23.0	5.0	17.5
Billings	18.5	20.5	6.0	16.5
Helena	21 0	23.0	6.0	17.5
Great Falls	20.5	22.5	6.0	17.5
Salt Lake, Utah	19.0	21 0	5.0	16.0
Twin Falls, Ida.	23.0	25.0	6.0	18.0
Boise	22.5	24.5	6.5	18.0
Albuquerque, N. M.	20.0	22.0	*6.5	13.0

*One-half cent city tax.

Discount to dealers with or without contract in Continental territory: Undivided dealer discount off service station price, 4 cents; divided dealer accounts, 3½ cents.

Southern District

STANDARD OIL CO. OF KENTUCKY

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Atlanta, Ga.	20 0	22.0	7.0	12.0
Augusta	20.0	22.0	7.0	14.0
Macon	20 0	22.0	7 0	13.0
Savannah	18 0	20 0	7.0	14.0
Birm'ham, Ala.	21.0	23.0	8.0	12.0
Mobile	20.0	22.0	8.0	10.0
Montgomery	22.0	24.0	8.0	13.5
Jackson, Miss.	19.0	21.0	7.0	11.0
Vicksburg	19 0	21 0	7.0	12 0
Jacksonville, Fla.	18.5	20.5	8.0	10.0
Miami	18.5	20.5	8.0	13.5
Pensacola	18.5	20.5	8.0	11.5
Tampa	17.0	19.0	8.0	11 0
Lexington, Ky.	19.5	21.5	6.0	10.0
Covington, Ky.	18.0	20 0	6.0	11.5
Louisville	18.5	20.5	6.0	10.0
Paducah	18.5	20.5	6.0	10.0

In addition to the state tax of 6 cents Montgomery, Ala., has a county tax of 1 cent per gallon and a city tax of 1 cent per gallon on gasoline, and one-half cent per gallon on kerosene. Mobile and Birmingham, Ala., each have a city gasoline tax of 1 cent per gallon. Pensacola, Ala., has a city gasoline tax of 1 cent.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Dallas, Tex.	15.0	17 0	5 0	7.0
Fort Worth	15.0	17.0	5.0	7.0
Houston	15.0	17.0	5.0	8.0
San Antonio	16.0	18.0	5.0	8.0
El Paso	17.0	19.0	5.0	10.0
Muskogee, Okla.	16.0	18.0	5.0	8.0
Okla. City	16.0	18.0	5 0	8.0
Tulsa	16 0	18.0	5.0	8.0
Ft. Smith, Ark.	14.5	18.0	5.0	8.0
Little Rock	17.0	20.5	7.5	9.5
Texarkana	15.5	17.5	5.0	8.0

Atlantic Coast District

STANDARD OIL CO. OF NEW JERSEY

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Atl'tic City, N. J.	13.5	17.0	4.0	9.0
Newark	13.5	17.0	4.0	7.5
Annapolis, Md.	14.8	18.3	5.0	10.0
Baltimore	14.3	17.8	5.0	7.5
Cumberland	15.8	19.3	5.0	12.7
Wash'g'n, D. C.	12.3	15 8	3.0	9.5
Danville, Va.	16.6	20.1	6.0	12.9
Norfolk	15.1	18 6	6.0	11.2
Petersburg	15 8	19.3	6.0	11.7
Richmond	15.8	19.3	6.0	11.7
Roanoke	16.8	20.3	6.0	12.9
Charles'n, W. Va.	15 0	18.5	5.0	12.6
Parkersburg	14.3	17.8	5.0	11.2
Wheeling	15.5	19 0	5.0	12.2
Charlotte, N. C.	18.4	21.9	7.0	13.5
Hickory	18.7	22.2	7 0	13.7
Mt. Airy	18.7	22.2	7.0	13.8
Raleigh	18.2	21.7	7 0	18.2
Salisbury	18.5	22.0	7.0	13.6
Charleston, S. C.	16.2	19.7	7.0	11.3
Columbia	18.0	21.5	7.0	13.2
Spartanburg	18.4	21.9	7.0	13.5

Tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at regular price less one-half cent. Discount for kerosene, 1 cent off tank wagon price for 25 gallons or more under contract (contract not necessary in Baltimore) except in New Jersey, where no discount (if necessary) is given.

Nebraska

STANDARD OIL CO. OF NEBRASKA

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Omaha	17.9	19.9	6 0	10.1
McCook	18.6	20.6	6 0	10.8
Norfolk	18.3	20.3	6.0	10.5
North Platte	18 7	20.7	6.0	10.9
Scottsbluff	19.4	21.4	6.0	11.6

Note: Discounts to dealers; where service station gasoline prices are (maximum overall, including rent) as follows: Reliance, 2½ cents; Standard Red Crown, 3½ cents; Red Crown Ethyl, 2½ cents.

Where service station gasoline prices are below normal resellers' allowances are reduced one-half of the amount below normal, down to the following (minimum overall, including rent): Reliance, 2 cents; Standard Red Crown, 3 cents; Red Crown Ethyl, 3 cents. Discounts to consumers for tank wagon deliveries covered only by Standard Commercial Consumers Contract, effective January 1, 1935.

Ohio

STANDARD OIL CO. OF OHIO

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Ohio points	17.0	19.0	5.0	*12.5

*Includes state tax of 1 cent.

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
San Francisco	16.5	18.5	4.0	11.5
Los Angeles	11.5	13.5	4.0	10.5
Fresno, Calif.	15.0	17.0	4.0	12.0
Phoenix, Ariz.	15.0	17 0	6 0	‡18.0
Reno, Nev.	19.0	21.0	5.0	13 0
Portland, Ore.	19.0	21.0	6.0	13.5
Seattle, Wash.	19.0	21 0	6.0	13.5
Tacoma	19.0	21.0	6.0	13.5
Spokane	22.0	24.0	6.0	16.5

*Retail prices posted by Standard Stations, Inc., a subsidiary.

†Prices are at company's plant or depots, as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where discount is 1 cent.

‡Includes 5-cent state tax.

Pennsylvania, Delaware and Part of New England

ATLANTIC REFINING CO.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Philadelphia, Pa.	15 0	17.0	4.0	9.0
Pittsburgh	16.0	18.0	4.0	10 0
Allentown	15.5	17.5	4.0	9.0
Erie	15.0	17.0	4.0	9.0
Scranton	16.0	18.0	4 0	10 0
Altoona	16.0	18.0	4.0	10.0
Dover, Del.	15.5	17.5	4.0	10.0
Wilmington	15.5	17.5	4.0	10.0
Springf'd, Mass.	13 2	16 7	4.0	7.5
Worcester	13.3	14.8	4.0	7.5
Hartford, Conn.	12.3	15.8	3.0	7.0
New Haven	12.2	15.7	3.0	7.5
Providence, R. I.	12.0	13.5	3.0	7.0

Note—Tank wagon prices are those applicable to consumers purchasing lots of 100 or more gallons in one delivery.

Central South District

STANDARD OIL CO. OF LOUISIANA

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
N. Orleans, La.	17.5	21.0	18.0	12.0
Baton Rouge	16.5	20.0	†7.0	11.5
Alexandria	17 5	21.0	†*8.0	10.5
Lafayette	18.0	21.5	‡*8.0	12.5
Lake Charles	18.0	21 5	†*8.0	12.5
Shreveport	16.0	19.5	†7.0	9.0
Knoxville, Tenn.	20.0	23.5	8 0	14.0
Memphis	18.0	21.5	8 0	11.0
Chattanooga	19.5	23.0	8 0	11.5
Nashville	19 0	22 5	8.0	12 0
Bristol	17 85	20.6	8.0	14.5

*Includes city tax of 1 cent.

‡Includes 2-cent parish tax. †Includes 1-cent parish tax.

Tank wagon gasoline refers to dealer instead of retail prices.

Price basis to dealers: Undivided dealers at dealer price less one-half cent.

Louisiana kerosene prices include 1-cent state tax.

New York and New England

SOCONY-VACUUM CO., INC.

	Gasoline			Kero.
	Post deal	Serv. sta.	Inc. tax	tank wag.
Albany, N. Y.	14.2	17.7	5.0	7.5
*Met. New York	15.05	19.3	5.0	7.25
*Br'kl'n, Queens	14.8	18.8	5.0	7.25
Buffalo	14 0	17.0	5.0	8 0
Rochester	14.0	17 0	5 0	8.5
Syracuse	14.0	17.0	5.0	8 5
Boston, Mass.	13.0	16.5	4.0	7.0
Portland, Me.	15.0	18.5	5.0	7.5
Manch'ter, N. H.	14.8	18 3	5.0	7.75
Burlington, Vt.	16.2	19.7	5.0	8.5

*Includes 2 per cent city sales tax.

Canada*

Imperial 3-Star Gasoline

IMPERIAL OIL, LTD.

	Gasoline			Kero.
	Tank wag.	Serv. sta.	Inc. tax	tank wag.
Hamilton, Ont.	22.0	25.0	6.0	17.5
Toronto, Ont.	22.0	25.0	6.0	17.5
Brandon, Man.	30.3	33.3	7.0	21.8
Winnipeg, Man.	28.7	31.7	7.0	20.2
Regina, Sask.	30.0	33.0	7.0	21.5
Saskatoon, Sask.	32.8	35 8	7 0	24.3
Edmonton, Alta.	32.2	35.2	7.0	23.7
Calgary, Alta.	29.5	32.5	7.0	21.0
Vancouver, B. C.	27.0	30.0	7.0	24.0
Montreal, Que.	20.5	23.0	6.0	17.0
St. John, N. B.	26.0	30.0	8.0	19.5
Halifax, N. S.	26.0	30.0	8.0	19.5

*Imperial gallon used in Canada.

In maritime provinces all dealers get 4 cents off service station price. In all other provinces open dealers get 3 cents off service station price and 1 cent additional to 100 per cent accounts, except Montreal City where open dealers get 2½ cents off service station price with 1 cent additional to 100 per cent accounts.

Naphtha

STANDARD OIL CO. (INDIANA)

	Tank wagon*
Oleum spirits	15.7
V.M.&P. naphtha	16.0
Cleaners' naphtha	15.0
Stanisol	15.0

*Prices include 3-cent Illinois tax, but not 1-cent federal tax or 2 per cent retail occupational tax.

Prices f.o.b. Chicago. Each price subject to discount of 1 cent per gallon for 150-gallon lots if covered by contract.

Retail Price Changes

Socony-Vacuum Oil Co., Inc., August 7 reduced posted dealer gasoline .5 cent and station gasoline 1 cent in Rochester; August 13 reduced posted dealer gasoline .25 cent in Rochester, advanced posted dealer gasoline .5 cent and station gasoline 1 cent in Buffalo, reduced posted dealer gasoline .5 cent and station gasoline 1 cent in Syracuse.

Standard Oil Co. of California August 15 reduced tank wagon and station gasoline 2 cents in Phoenix.

Standard Oil Co. (Indiana) August 10 reduced tank wagon and station gasoline .7 cent in Detroit; August 15 advanced tank wagon and station gasoline 1 cent in Minneapolis.

Standard Oil Co. of Louisiana August 7 reduced tank wagon kerosene 1.5 cents in New Orleans.

Standard Oil Co. of New Jersey August 9 reduced tank wagon kerosene 1 cent in Baltimore.

Standard Oil Co. of Kentucky July 11 advanced tank wagon gasoline 1 cent and station gasoline 2 cents in Augusta, advanced tank wagon and station gasoline 1 cent in Atlanta, advanced tank wagon gasoline .5 cent and station gasoline 1 cent in Macon, reduced tank wagon and station gasoline .5 cent in Savannah; July 22 reduced tank wagon kerosene 1 cent in Mobile; July 29 advanced tank wagon kerosene 1 cent in Augusta; August 10 reduced tank wagon kerosene 1.5 cents in Jacksonville, reduced tank wagon and station gasoline 1.5 cents and tank wagon kerosene 1.5 cents in Tampa; August 15 advanced tank wagon gasoline .5 cent and station gasoline 1 cent in Vicksburg.

Continental Oil Co. August 16 reduced tank wagon and station gasoline 2 cents in Salt Lake City.

Crude Oil Price Changes

Rodessa Field crude oil, in Caddo County, La., will be listed in the crude oil price schedules as Caddo light crude which commands a price of $1.03 per bbl. on present schedule.

Four out of five filling stations are owned and operated by individuals, and annual sales of the average station are slightly less than $9,000.

Chicago Markets

CHICAGO, Aug. 19.—Gasoline gallonage is giving the oil trade no worry. Volume in the Middle West continues at record-breaking levels. The extremely large demand has been a life-saver this summer, withdrawing from storage in spite of high production. There is a hint of improvement in the tank wagon-service station situation in the metropolitan areas. This took the form of a 1-cent advance at Twin Cities, Minn., August 16, the result of stabilization work. Similar work has been done, or attempted, in other cities. However, the handicaps are admittedly heavy in such sections as Chicago; also Detroit and other Michigan points, due partly in the latter case to the rise of the Michigan industry in its own right.

For the whole central region as a whole, however, encouragement is felt. Jobbers, despite their endeavor to hold their stocks low, are being forced to order more rapidly than either they or their suppliers expected would be the case. Many of them are forced to extend their purchases from an exclusive contract basis where they expected to remain, to spot buying, in addition.

Crude Oil Prices

Oklahoma, Kansas, North Central and East Central Texas

Corsicana (heavy) (June 17, 1933)	.80
East Texas	$1.00
Other fields	(See gravity table)

West Texas

Crane, Upton, Crockett, Howard, Glasscock, Mitchell (Sept. 29, 1933).	$ .70
Ector, Winkler and Pecos Counties and Lea County, New Mexico (Sept. 29, 1933)	.75
Pecos County, Yates shallow Pool (Sept. 29, 1933)*	.65
Jones and Fisher Counties*	(See gravity table)

North Louisiana and Arkansas

Smackover, Ark. (all grades)	$ .70
Tullos, Urania, La. (Jan. 13, 1934)	.87
Nevada, Ark. (Sept. 29, 1933)	.60
East El Dorado (Sept. 29, 1933)	.70
Converse, La. (Mar. 17, 1934)	1.03
Elm Grove, La. (Sept. 29, 1933)	.75
Holly, La. (Nov. 17, 1934)	1.03
Pleasant Hill, La. (Mar. 17, 1934)	1.03
Zwolle, La. (Mar. 17, 1934)	1.03
Champagnolle, Ark. (Mar. 17, 1934)	.81
Lisbon, Ark (Mar. 17, 1934)	1.03
Stephens, Ark. (Sept. 29, 1933)	.70
Urbana, Ark. (Mar. 17, 1934)	.60
Other fields	(See gravity table)

South Central and Southwest Texas

(See note below table)

Darst Creek	$ .87
Mirando (June 29, 1935)	.75
Luling (Sept. 29, 1933)	.75
Pettus	1.05
Salt Flat	.87
Lytton Springs (Sept. 29, 1933)	.95
Duval County	.75
Saxet (June 29, 1935)	.80

Rocky Mountain States

Iles, light (Sept. 29, 1933)	$ .96
Iles, heavy (Sept. 29, 1933)	.90
Florence, Colo. (June 17, 1933)	.80
Fort Collins and Wellington, Colo. (June 17)	(See Salt Creek prices)
Big Muddy (Sept. 29, 1933)	$1.01
Frannie, light (May 1, 1934)	.70
Frannie, heavy (Sept. 29, 1933)	.62
Salt Creek and LaBarge (Sept. 29, 1933)	(See Stanolind Mid-Continent price schedule)
Grass Creek, light (Sept. 29, 1933)	$1.18
Grass Creek, heavy (Sept. 29, 1933)	.62
Elk Basin (Sept. 29, 1933)	1.18
Rock Creek (Sept. 29, 1933)	1.02
Lance Creek (Dec. 16, 1932)	.92
Hudson (June 2, 1931)	.65
Lost Soldier (Sept. 30, 1933)	.88
Hamilton Dome, all grades (Feb. 16, 1935)	.57
Torchlight (Sept. 29, 1933)	1.18
Greybull (Sept. 29, 1933)	1.18
Pondera (Sept. 29, 1933)	1.25
Sunburst (July 19, 1935)	1.20
Cat Creek, Montana	1.07
Hogback (Sept. 29, 1933)	1.11
Lea County, N. Mex. (Sept. 29, 1933)	.75
Maljamar (Sept. 29, 1933)	.70
Artesia-Jackson (Dec. 1, 1933)	.75

Gulf Coast

Grade A and Grade B specification discontinued by leading buyers.

Hardin (Aug. 8, 1935)	(See gravity table)
Tomball (see note)*	$.93
Livingston (Sept. 29, 1933)†	1.10
Cleveland (Jan. 11, 1934)	1.00
Greta	1.00
Refugio, light	.80
Refugio, heavy (June 29, 1935)‡	(See gravity table)
Markham and High Island	.80
Conroe	(See Gulf Coast gravity table)
Bosco, La. (Jan. 18, 1935)§	(See Conroe gravity table)
	$ .90

Anahuac and Dickinson posted by Humble August 20, 1935, price of 94 cents per barrel on 30-30.9 gravity with 2 cents per degree increase with top 40 gravity $1.14.

Note—Tomball, effective September 29, by Humble Oil & Refining Co. and October 2 by Magnolia Petroleum Co., and November 10 by Stanolind Crude Oil Purchasing Co.

*Greta posted by Texas Co. †Shell Petroleum Corp. ‡Refugio heavy by Humble Oil & Refining Co., Cleveland and Hardin posted by Magnolia Petroleum Co. §Bosco posted by Pure Oil Co.

Middle Western States

OHIO OIL CO

Lima (Feb. 1, 1935)	$1.15
Illinois (Jan. 5, 1934)	1.13
Princeton, Ind. (Jan. 5, 1934)	1.13
Plymouth	Shut in
Midland, Mich. (Sept. 30, 1933)*	$1.02
West Branch, Mich.	.86
Oceana, Mich (Oct. 5, 1933)	.90
Somerset, Ky. (May 20, 1935)	1.13
Western Kentucky (May 22, 1935)	1.13

*Posted by Pure Oil Co. and Simrall Pipe Line Co. Producers Pipe Line Co. pays 5 cents per barrel over Pure Oil Co.'s posted prices. West Branch, Mich., posted by Simrall Pipe Line Co. Somerset, Ky., crude purchased by Ashland Refining Co. Ashland, Ky., and posted prices includes premium. Oceana posted by Old Dutch Refining Co. and Naph-Sol Refining Co.

Eastern States

TIDE WATER PIPE CO.
(Effective July 16, 1935)

Bradford, Pa.	$1.95
Allegany, N. Y.	1.95

SOUTH PENN OIL CO.
(Effective July 16, 1935)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field)	$1.93
Pennsylvania Grade Oil in Southwest Pennsylvania Lines	1.67
Pennsylvania Grade Oil in Eureka Pipe Line lines	1.62
Pennsylvania Grade Oil in Buckeye Pipe Line lines	1.52
Corning Grade Oil in Buckeye Pipe Line Co.'s lines	1.33

PENNZOIL CO.
(Effective July 16, 1935)

Pennsylvania Grade Oil in National Transit Lines:	
Group A	$1.92
Includes Cochran, Franklin, Hamilton and Doolittle districts.	
Group B	1.9-
Includes Titusville district.	
Group C	1.9-
Includes Turkey and Tidioute districts.	
Group D	1.89
Includes Bear Creek and Porkey districts.	
Group E	1.84
Includes Eldeneau, Bull Creek, Rough Run, Carbon, Dipner, Bredlin, McJunkin, Jameson, Kennerdell, Emlenton, Tiona, Lacey and Kinzua districts.	

Price depends on length of pipe line haul to plant at Oil City.

PURE OIL CO
(Effective July 16, 1935)

Cabin Creek, W. Va.	$1.62
Bradford Hollow, W. Va.	1.62
Kelly Creek, W. Va.	1.62

Canada

Ontario (Sept. 9, 1933):	
Petrolia*	$2.10
Oil Springs	2.17
Turner Valley (May 21, 1934):†	
Clear naphtha	2.55
Discolored naphtha	2.37
Crude oil, 50 gravity	2.10
Crude oil, 45 to 49.9	2.07
Crude oil, 40 to 44.9	1.60

*Imperial Oil, Ltd. †Imperial Oil, Ltd., and Regal Oil & Refining Co.

Mexico

Panuco*	$.955

*F.o.b. ship, based on May transactions and exclusive of production and export taxes and bar dues.

Crude Oil Gravity Prices

Gravity—	Oklahoma and Kansas	North Texas, Central Texas and East Central Texas	North Louisiana and Arkansas	Gray County, Texas	Carson, Hutchinson and Moore Counties, Texas	Conroe, Texas	Salt Creek, Wyo.	Gulf Coast, Texas and Louisiana	Gulf Coast, Texas and Louisiana	Cotton Valley, Louisiana
	1	2	3	4	5	6	7	8	9	10
Below 20	....	....	....	....	....	....	....	$.82	$.82	....
20-20.9	....	....	....	....	....	....	....	.84	.84	....
21-21.9	....	....	....	....	....	....	....	.86	.86	....
22-22.9	....	....	....	....	....	....	....	.88	.88	....
23-23.9	....	....	....	....	....	....	....	.90	.90	....
24-24.9	....	....	....	....	....	....	....	.92	.92	....
Below 25	*$.76	....	....	....	....	....	....	....	....	$.70
25-25.9	*.78	....	....	....	....	....	....	.94	.94	.72
26-26.9	*.80	....	....	....	....	....	....	.96	.96	.74
27-27.9	*.82	....	....	....	....	....	....	.98	.98	.76
28-28.9	*.84	....	....	....	....	....	....	1.00	1.00	.78
Below 29	.84	$.79	$.79	....	....	....	$.84	....	....	....
29-29.9	.86	.81	.81	....	....	....	.86	1.02	1.02	.80
30-30.9	.88	.83	.83	....	....	....	.88	1.04	1.04	.82
31-31.9	.90	.85	.85	....	....	....	.90	1.06	1.05	.84
32-32.9	.92	.87	.87	....	....	....	.92	1.08	1.06	.86
33-33.9	.94	.89	.89	....	....	....	.94	1.10	1.07	.88
34-34.9	.96	.91	.91	....	....	....	.96	1.12	1.08	.90
Below 35	....	....	....	$.79	$.69	....	....	....	....	....
35-35.9	.98	.93	.93	.81	.71	$1.09	.98	1.12	1.09	.92
36-36.9	1.00	.95	.95	.83	.73	1.11	1.00	1.12	1.10	.94
37-37.9	1.02	.97	.97	.85	.75	1.13	1.02	1.12	1.11	.96
38-38.9	1.04	.99	.99	.87	.77	1.15	1.04	1.12	1.12	.98
39-39.9	1.06	1.01	1.01	.89	.79	1.17	1.06	1.12	1.13	1.00
40 and over	1.08	1.03	1.03	.91	.81	1.19	1.08	1.12	1.14	1.02

California Crude Oil Prices

STANDARD OIL CO. OF CALIFORNIA

For current purchases of crude oil at the well (unless otherwise specified). (All gravities above these quoted take highest price offered in that field.)

(Effective September 6, 1933)

Gravity—	Long Beach	Seal Beach, Alamitos Heights	Huntington Beach	Inglewood	Playa del Rey	Olinda, Brea Canyon	Athens-Rosecrans	Torrance	Richfield	Whittier, La Habra	Montebello	Santa Fe Springs La Habra-Coyote		Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Coalinga	Coyote	Mountain View	Elwood Terrace	Newhall, McKittrick, Kern River	Wheeler Ridge	Kettleman Hills	Shiells Canyon, South Mountain, Santa Paula
14-14.9	$.65	$.65	$.65	$.65	$.65	$.65	....	$.65	$.65	$.65	$.65	....	$.65	$.57	$.57	$.57	$.65	$.57	....	$.57	$.57	....	$.57
15-15.9	.65	.65	.69	.69	.66	.69	....	.66	.65	.65	.65	....	.65	....	....	....	.65	.57	....	.57	.57	....	.57
16-16.9	.66	.65	.72	.73	.69	.73	....	.69	.67	.68	.65	....	.65	....	....	....	.65	.57	....	.57	.57	....	.57
17-17.9	.69	.65	.75	.76	.73	.76	....	.72	.70	.71	.65	....	.68	....	....	....	.68	.57	....	.57	.57	....	.57
18-18.9	.72	.65	.78	.80	.76	.79	....	.75	.74	.74	.65	....	.71	.61	.61	.69	.71	.57	....	.57	.58	....	.60
19-19.9	.75	.65	.81	.83	.80	.82	....	.78	.78	.78	.65	....	.74	.64	.65	.62	.74	.57	....	.57	.61	....	.63
20-20.9	.78	.68	.83	.87	.83	.85	....	.81	.82	.81	.66	....	.78	.67	.69	.65	.78	.58	....	.57	.64	....	.66
21-21.9	.81	.72	.86	.90	.87	.88	....	.83	.85	.84	.69	$ .72	.81	.70	.73	.68	.81	.59	....	....	.67	....	.69
22-22.9	.84	.76	.89	.94	.90	.92	....	.85	.89	.87	.72	.76	.84	.73	.76	.72	.84	.61	....	....	.70	....	.72
23-23.9	.88	.81	.92	.97	.94	.95	$.83	.89	.92	.90	.76	.79	.87	.77	.79	.75	.87	.63	....	....	.73	....	.75
24-24.9	.91	.85	.95	1.01	.97	.98	.86	.92	.97	.93	.80	.82	.90	.81	.82	.78	.90	.66	....	....	.76	....	.78
25-25.9	.94	.89	.98	....	1.00	1.01	.90	.95	1.00	....	.85	.87	.93	.85	.85	.81	.93	.69	....	....	.79	....	.81
26-26.9	.97	.93	1.01	....	1.04	1.04	.94	.98	1.04	....	.89	.90	.96	.89	.88	....	.96	.72	....	....	....	....	.84
27-27.9	1.00	.98	1.04	....	....	1.07	.97	....	1.08	....	....	.94	.99	.93	.91	....	.99	.75	....	....	....	....	.88
28-28.9	1.03	1.02	1.07	....	....	1.10	1.01	....	1.11	....	....	.98	1.02	.97	.94	....	1.02	.78	....	....	....	....	.92
29-29.9	1.06	1.05	1.09	....	....	....	1.04	....	1.15	....	....	1.01	1.05	1.01	.97	....	1.06	.81	....	....	....	....	.96
30-30.9	1.09	1.10	1.12	....	....	....	1.08	....	....	....	....	1.05	1.09	1.05	1.00	....	1.09	.84	....	....	....	....	1.00
31-31.9	....	....	....	....	....	....	1.12	....	....	....	....	1.08	1.12	1 09	....	....	1.12	.87	....	....	....	....	....
32-32.9	....	....	....	....	....	....	1.15	....	....	....	....	1.12	1.15	1 13	....	....	1.15	.90	....	....	....	....	....
33-33.9	....	....	....	....	....	....	....	....	....	....	....	1.16	1.18	1.17	....	....	1.18	.93	1.03	....	....	.93	....
34-34.9	....	....	....	....	....	....	....	....	....	....	....	1.19	1.21	....	....	....	1.21	....	1 06	....	....	.96	....
35-35.9	....	....	....	....	....	....	....	....	....	....	....	1.23	....	....	....	....	....	....	1.09	....	....	.99	....
36-36.9	....	....	....	....	....	....	....	....	....	....	....	1.26	....	....	....	....	....	....	1.12	....	....	1.02	....
37-37.9	....	....	....	....	....	....	....	....	....	....	....	1.30	....	....	....	....	....	....	1.15	....	....	1.05	....
38-38.9	....	....	....	....	....	....	....	....	....	....	....	1.34	....	....	....	....	....	....	....	....	....	1.08	....
39 and over	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1.11	....

NEW OR IMPROVED EQUIPMENT

Allis-Chalmers Offering Pump for High-Head Service

The new type MM multistage pump developed by Allis-Chalmers Manufacturing Co., Milwaukee, Wis., for heads from 400 to 1,600 feet, and capacities up to 400 gallons per minute, is designed along the general lines of the Allis-Chalmers type M pump.

MM pumps are horizontal shaft, split casing, double suction, and bronze fitted. The use of double-suction runners equalizes end thrust and eliminates the use of internal balancing arrangements. Each stage of the casing has a spiral volute, and between stages the liquid flows from one volute into an exceptionally long diffusion nozzle and then into a long sweep return bend to the inlet passages of the following stage. This construction results in maximum practical regain of pressure between stages as the liquid is directed along smooth flow lines without sudden changes in velocity. The pressure on the stuffing boxes is kept to approximately the suction pressure. The pumps are offered as particularly economical for production, refinery, boiler-feed and other high-head pumping service.

New General Duty Welding Torch

A new welding torch, the Purox No. 35 general duty welding torch, is announced by Linde Air Products Co., 30 East Forty-second Street, New York. Constructed of extruded brass, monel metal, and drawn copper, and with silver soldered tubes, this torch can stand rough treatment. Its range of usefulness makes it equally adaptable to the lightest as well as the heaviest work to be found in any welding shop. It is listed by Underwriters' Laboratories, Inc. The ribbed design of the extruded brass handle reinforces the torch and enables it to be easily gripped.

Substitutions in Gasoline Are Detected by "Armorize"

A method of identifying gasoline, branded by the use of color, has been patented. Copyright is pending for the use of the name "Armorize" to identify products employing the method.

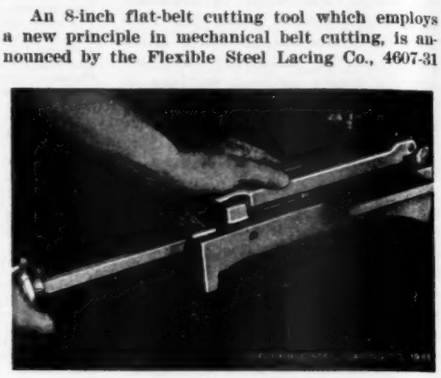
The purpose of "Armorize" treatment of colored gasoline is to make possible easy detection of third grade or bootleg material, colored to represent, and sold as the standard product. In various parts of the country, dishonest filling station operators have substituted or diluted standard high test gasoline with the use of colored bootleg gasoline. The motorist can now be safeguarded against this fraud by the "Armorize" treatment of colored gasoline.

"Armorize" is readily applied when the gasoline is being colored at the refinery, and by the same method. The test to determine the quality and origin of the gasoline is made by drawing a specimen into a test tube or similar receptacle, to which is added a prepared solution and immediately a reaction takes place which establishes beyond a doubt the fact that the product examined is the gasoline supplied by the tester, or that it is a product originating from a foreign source. Since the test of "Armorized" gasoline is absolute, the preparation presents an opportunity to the refineries to maintain complete control over the sale of standard products and eliminate the fraudulent practice of some filling stations.

F. W. Thompson of Appleton, Wis., has joined the force of the Four Wheel Drive Auto Co., Clintonville, Wis., as director of research. He is a graduate of Lawrence College.

New Principle Is Employed by "Alligator" Belt Cutter

An 8-inch flat-belt cutting tool which employs a new principle in mechanical belt cutting, is announced by the Flexible Steel Lacing Co., 4607-31



Lexington Street, Chicago. The cut is made by pushing the knife through the belt from one edge to the other. The knife, mounted on a plunger in a slot, as illustrated, is operated by a direct arm push without mechanical leverage.

The knife goes easily through most belting, but the manufacturers say it will cut even the thickest and toughest belts up to 8 inches in width with surprisingly little effort. The knife, which is made of special alloy steel, will make several thousand cuts and is easily replaceable.

The belt is held immovable by the equalizing clamp or hold-down while the cut is being made. The clamp is also a guard for the blade. Clamp and frame are strongly built of aluminum alloy, the weight of the cutter being only 4 pounds and 3 ounces. The cutter, named the "Alligator" by the manufacturer, is used either on the bench, as illustrated, or upended on the floor.

Wide Field of Service Is Filled by New Centrifugal Pumps

A new line of double suction, single-stage, split-case centrifugal pumps is announced by the Gardner-Denver Co., Quincy, Ill. These pumps are adaptable to practically any class of service, and are particularly recommended by the company for general water supply in industrial establishments, office buildings, etc., owing to their compactness and their high efficiency.

The pumps are designed for any type of drive, including flat belt, V-belt, direct connected, gas or Diesel engine, although the usual drive is connected directly to an electric motor. The series covers all heads up to approximately 300 feet, each type of pump covering a certain percentage of head. Gardner-Denver engineers point out features which contribute to higher efficiency, easy operation and inexpensive maintenance. Attention has been given to making the pump easy to maintain. The shaft sleeve nut, for example, is located outside the pump and next to the pumping housing, a convenience in tightening sleeves. This nut is also used as a jack to remove the ball bearing.

New Chemical Goggle

A new goggle, effectively ventilated but giving protection from splashes of dangerous liquids and the impact of flying particles, has been announced by American Optical Co., Southbridge, Mass. It is called the AO Duralite-50 chemical goggle. The eyecups are molded to fit snugly to the contour of the face and so prevent liquid from entering around the goggle. Air circulates through slots in the lens rings, through the radial slots in the eyecups and through the perforated side shields. A solid baffle plate back of the side shield is flared

Touring in Cummins Diesel Powered Bus

This picture, taken in the Seminole Field, Oklahoma, shows a group of men who are traveling in a Cummins Diesel powered bus, looking over oil fields and making observations on the performance of Cummins engines which are operating on drilling rigs in the Mid-Continent.

The men, from left to right, are D. J. Cummins, field representative for Cummins Engine Co., P. J. Dasey, sales engineer for Mid-Continent Supply Co.; J. E. Everroad, of the engine test division of Cummins Engine Co., and H. J. Knudsen, chief engineer of Cummins Engine Co.

out on the edge nearest the lens, permitting air circulation but isolating the eyes from splashes. The goggle is fitted with superarmorplate lenses, case hardened, providing maximum lens protection from impact. The adjustable rubber-covered ball chain bridge, together with the adjustable one-piece headband provides for exact and comfortable fitting to individual workers.

New Type of Dynamometer Is Put on Market by Falk

A new type of dynamometer which works on the extensometer principle has been introduced by Falk Corp., Milwaukee, Wis. This instrument, intended primarily for weighing pumping wells, either beam or rod line, is called the Falk Wellometer. It attaches to the polish rod or rod line and measures the stretch of the rod, translating this on the dial into pounds pull. The modulus of elasticity being approximately the same for all steels, no appreciable difference in reading is obtained regardless of the kind of steel used in the manufacture of the polish rod or rod line.

The Wellometer weighs only 20 pounds and is said to have proved itself particularly useful in taking quick observations of trouble wells. The manufacturer says it takes only 10 minutes to weigh a well, including time for attaching, and will show instantly the peak load above and below the weight of the rods, will determine whether the pump is properly spaced, whether the plunger is sticking, or whether the standing valves and plunger are operating properly, also whether the well is being pumped in the natural period of the rods or whether a change of speed or stroke length is necessary. The instrument is not recording, but a card can be plotted in a few minutes after observing the action of the dial.

Rotary Hose Is Built to Stand Hard Usage in the Field

A rotary hose that can "take it" without leaking, seeping or blowing out under the most severe working conditions is said to have been achieved in the Grizzly Powerflex. This steel armored hose, according to the manufacturer, is extremely tough and strong, yet flexible enough to absorb the hammering pulsations of the pump without being affected by the consequent strain. The hose is built to withstand pressures greater than those which are likely to be encountered in well drilling.

A full 2½-inch opening permits free circulation and minimizes friction, adding to the life and

serviceability of the hose. The outer protective cover is designed for the hard service of the oil field and for exceptional durability. This hose is manufactured by E. M. Smith Co., Los Angeles, Calif., and distributed by the T. T. Word Supply Co., Inc., Houston, Tex., in all its stores.

National Lead Subsidiary Grows

National Pigments & Chemical Co., subsidiary of National Lead Co., which owns and controls the basic patents governing the use of Aquagel and Baroid, has acquired ownership of the California Talc Co. including mines, plant and equipment, and the Baroid Sales Co. Starting in 1928 with one distributing point, in Los Angeles, the California Talc Co. and Baroid Sales Co. now carry over 100 stocks, serving every active oil field in the United States. Besides research laboratories, Baroid Sales Co. maintains a staff of engineers in all domestic oil fields, operating laboratory cars containing complete mud-testing equipment.

Men Widely Known in the Equipment Field

J. D. JOHNSON, JR.

J. D. Johnson, Jr., has moved to Tulsa from Kansas City, Mo., to represent the Gatke Corp. of Chicago, manufacturer of brake linings and friction materials of all types for industrial oil field machinery, including automotive brake materials and a full line of asbestos products. The company supplies oil-field machinery manufacturers besides distributing its friction materials through the Republic Supply Co.

Mr. Johnson's sales experience started in the Burkburnett Field in 1920, when he joined the staff of the Tide Water Oil Sales Corp. Until recently he had been western division manager of Pennzoil Co. In his new post he will look after Oklahoma, Kansas, and other parts of the Mid-Continent territory. He will be located at 1524 South Columbia Place, Tulsa.

Bulletins, Booklets and Other Literature for the Trade

Articles of interest to the oil industry, including one on nickel-alloy sucker rods are in the current issue of Nickel Steel Topics, published by the International Nickel Co., New York.

A new vibratory screen, designed by D. S. Patterson, is described in a circular offered by Arthur T. Ward, 50 Church Street, New York.

The current issue of the Power Specialist, published by Johns-Manville, 22 East Fortieth Street, New York, contains the first of six articles on asbestos, its origin, characteristics, history and uses.

Bulletin No. 110, issued by Novo Engine Co., Lansing, Mich., covers duplex reciprocating pumps especially adaptable to the oil fields, for handling water and as crude oil gathering pumps.

The Metallizing Co. of America, Inc., with general offices in Los Angeles, Calif., has prepared a pamphlet covering the uses of metal spraying equipment on general maintenance applications.

The entire line of Tag diaphragm valves is described and illustrated in a 16-page bulletin which C. J. Tagliabue Manufacturing Co., Park and Nostrand Avenues, Brooklyn, N. Y., announces.

"Hot Shots," published by the Lane-Wells Co., 4439 Santa Fe Avenue, Los Angeles, Calif., is a bright newcomer among the house organs of oil-field equipment manufacturers. "Give Your Production Department a Break," is among the helpful articles which make up the current issue.

A folder, "Information Helpful in Specifying Wire Rope," published by the Macwhyte Co., Kenosha, Wis., gives the wire rope user a summary of the things to consider in selecting rope.

Cutting Machine of New Type Made by Oster-Williams

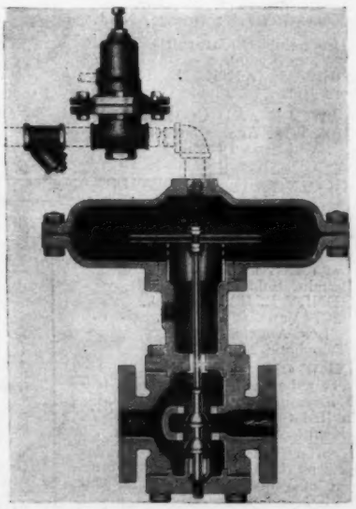
The new Oster-Williams No. 212 machine for cutting pipe intersections, announced by Oster-Williams, 2057 East Sixty-first Place, Cleveland, Ohio, takes into consideration the impossibility of doing a first-class pipe welding job without proper preparation for the weld. This preparation usually includes cutting off and beveling the end of the cutting and beveling the size and shape hole in the side of the pipe, so that when the two pieces are brought together they make a snug intersection which can be properly welded.

This new Oster-Williams cutting machine duplicates in design any pattern required to do practically any kind of pipe welding job without using cams, templates or special fixtures, and the finished surface has the appearance of a lathe tool cut. The cutting torch is accurately guided by an unusually ingenious mechanism.

Temperature More Accurately Controlled by Regulator

Greater fuel economy and more accurate control of furnace temperatures are claimed for a new gas pressure regulating valve, developed by McAlear Manufacturing Co., 1901 Southwestern Avenue, Chicago. The valve is fundamentally a pressure balanced unit. Its operation depending entirely on equalized pressures in the upper and lower diaphragm chambers of the main valve.

Either air or clean, dry gas may be used as the operating medium. This medium is piped through the pilot valve to the top of the main valve diaphragm and is maintained by the setting of the pilot at a pressure slightly lower than that which is to be controlled by the main valve. The pressure to be controlled is piped from the downstream side of the valve to the lower diaphragm



chamber. Thus, the slightest increase in the downstream pressure exerts its force on the under side of the diaphragm and tends to close the valve. A drop in pressure causes the operating medium above the diaghragm to throttle or open the valve.

The valve is said to be suitable for inlet pressures up to 100 pounds and to be easily adjusted to maintain combustion pressures at any point from 4 ounces to 35 pounds. Two types of pilot valves are offered, one with screw adjustments for direct mounting on the regulator, as shown in the illustration, and one with an adapter and composition hand wheel for mounting on a panel board to permit control of gas pressures to burners from a centralized control room.

Bituminous Pavements Safer

The constantly increasing speeds at which the modern motor car is being driven has placed a heavy responsibility on the highway engineer. Smoother, wider and more skid-proof surfaces have become essential in order that the safety factor keep pace with increased speed. Cracks, rough joints and sharp edged pavement, which were not particularly dangerous at slower speeds, have become real safety hazards.

The Low Cost Roads Association reports highway engineers in many states are solving the safety problem by adapting the bituminous type surfaces which are used on three quarters of our city streets to both the arterial and secondary highways. Because of the greater economy the bituminous types can be built wider and with a given appropriation more miles can be built to relieve traffic congestion.

No joints are necessary in the bituminous type highways. They are semiflexible and do not crack.

Beer As Oil Premium

In Montreal beer is 15 cents per quart; motor oil, 25 cents per quart.

Montreal garages had a price war recently. First they offered free gasoline with purchases of a gallon or more of oil. When that became commonplace, Gollert's garage offered a new attraction. With every purchase of 5 gallons of oil ($4.98) went 7 quarts of beer—a premium, at list prices of $1.05.

Canadian Gasoline Imports

OTTAWA, Canada, Aug. 17.—Imports of natural casinghead, compression or absorption gasoline lighter than .6690 specific gravity amounted to 7,090,856 gallons valued at $358,084 in May compared with 826,274 gallons valued at $35,435 in April. While the April imports were all from the United States, some 2,583,777 gallons of the May imports, valued at $108,132, came from Peru. Imports of gasoline lighter than .8235 specific gravity, all from the United States, were 1,256,328 gallons valued at $112,561 in May compared with 1,194,867 gallons worth $96,702 in April. Exports of gasoline and naphtha in May totaled 1,441,847 gallons valued at $158,235 compared with 2,541 gallons worth $429 in April.

CLASSIFIED ADVERTISING

Royalties—Production

HAVE MARKET FOR SUBSTANTIAL PRODUCING ROYALTIES

Exceptionally high immediate return not essential—prefer properties partially developed, with excellent future — must be priced right.

We file all requirements with Federal Securities Commission and convert your royalties into cash promptly.

JAMES B. McANALLY
Tulsa, Oklahoma.

PRODUCING OIL ROYALTIES
Bought (Wholesale) Sold.
Inquiries invited from Oil Companies, Bankers, Dealers.
M-K OIL COMPANY, INC.
20 Broad St. New York.

VAN POOL — EAST TEXAS
Bought — Sold — Wholesale.
W. R. Brown & Co., Inc.
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at wholesale.
ROBERT L. KINKAID, INC.
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J. A. WOLF AND COMPANY
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Dealers in Oil Royalties since 1918.

PRODUCING OIL ROYALTIES
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H. P. BOWEN
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PRODUCING OIL ROYALTIES
(ALL FIELDS)
Bought, Sold and Quoted.
HENRY L. BAKER CO.,
207 Van Nuys Bldg.,
Los Angeles, Calif.
Telephone Trinity 7391.

NEW OIL OFFERING
will presently be made with attrac. features for investors and dealers. Reliable dealers invited to communicate. ORAS A. SHAW, Kennedy Bldg., Tulsa, Okla.

I CAN offer 100 royalty acres under a drilling well in Collingsworth County on the edge of Wheeler County. The well is down 1400 feet to be finished about September 1st. Drilled by Smith Bros. Refining Company of McLean, Texas. They have drilled twenty wells in this northwest Texas field without a dry hole. The last two have been five and six thousand barrels a day. Looks like we are sure to get production. Price on request very much below its worth. Have the best producing royalties in Van, East Texas and Northwest Texas. Also California. I will buy in any of these fields. P. R. Knickerbocker, 125 Coral Avenue, Balboa Island, California.

40,000 acres in Tallahatchie and Yalobusha Co., Miss., located on excellent geological structure, defined by several well known geologists. Would like to contact reliable parties able to assist in test. and dev. this prop. Address W.S.B. & Co., 1208 Commerce Title Bldg., Memphis, Tenn.

Royalties—Production

ANDREW J. BARRETT
The Philtower
Tulsa, Oklahoma.

Van—East Texas—Louisiana Royalties
Bought—Sold.
WILLIAM MONROE LAYTON
67 Wall St., Suite 1510, New York City.

Income Producing Royalties
Mid-Continent Field
Harry A. George
427 Perrine Bldg., Oklahoma City, Okla.

DEALERS IN ODD LOTS
EAST TEXAS AND VAN POOL
PRODUCING OIL ROYALTIES
We Buy and Sell.
E. T. MARION REAL ESTATE CO.
401-2 Slaughter Bldg.,
Dallas, Texas.

CALIFORNIA OIL ROYALTIES
Dealers Only.
Signal Hill—Huntington Beach
Kettleman Hills
RICHARDS & COMPANY
650 So. Spring St., Los Angeles, Calif.

CALIFORNIA ROYALTIES
Specializing in Signal Hill. Schedules and Engineer's Reports furnished. Inquiries invited. A. J. Merrick & Co., 650 S. Spring Street, Los Angeles, California.

GULF COAST ROYALTIES
Bought and Sold.
Producing and non-producing royalties in salt dome fields of Texas and Louisiana.
ZENI OIL COMPANY
412 Esperson Bldg., Preston 4420.
Houston, Texas.

Royalties—Production

Brokers—Salesmen

Sell in the most active area in the United States—The Permian Basin of West Texas and Southeastern New Mexico. From the standpoint of royalty investors this area has much to offer. Can supply you with choice non-producing royalties located on geophysical highs. Also drilling blocks, close in acreage to production, or wildcat leases. I maintain my own field men who cover this area for me. All offerings meet the requirements of the Securities and Exchange Commission. Inquiries invited.

B. D. BUCKLEY
Paul Brown Bldg. St. Louis, Mo.

BETTER CLASS
MONTHLY PAYING ROYALTIES
Quoted Dealers Exclusively.
W. E. COOK
Suite 812, Palace Bldg., Tulsa, Okla.

Dealers—Salesmen to handle overriding royalty on Pennsylvania lease now in course of development. Filed with Securities & Exchange Commission. William H. Conlin, 535 Fifth Ave., New York, N. Y.

Royalties—Production

FOR SALE: 1/64 royalty of 160 acres, Sec. 21, block 46, Andrews County, Texas. Alfred Delez, Electra, Texas.

HIGH GRADE producing oil and gas royalties offered to dealers. Billie Smallwood, P. O. Box 2261, Tulsa, Okla.

OIL REPORT SERVICE
Specimen and Particulars on Request.
OIL INFORMATION BUREAU
501-04 Petroleum Bldg., Okla. City, Okla.

Situations Wanted

YOUNG ENGINEER, graduate E.E. Experienced in design, construction and maintenance of electrical equipment for refineries and pipelines. Can assume responsibility. Box G-811, The Oil and Gas Journal, Tulsa, Okla.

ENGINEER—18 yrs. exp., oil refineries and nat. gasoline plant design, construction, operation and management. Some equip. manufacture and sales exp. Box G-810, The Oil and Gas Journal, Tulsa, Oklahoma.

Help Wanted

MANUFACTURER offering high grade chemical and mechanical service has opening for A-1 representative calling on oil industry. Profitable line. Commission. State lines now carried and territory covered. Address Box G-762, The Oil and Gas Journal, Tulsa, Oklahoma.

Financing

PROSPECTUSES prepared and deals shaped up for registration or exemption under Federal Security Act. Fee basis. John Morris, Seventh Floor, 1237 Market St., Philadelphia, Pa.

MILLER, 604 W. Seventh St., Tulsa, Okla. Prospectus preparation and presentation. General assistance in all marketable matters. Correspondence invited.

OIL AND MINING Companies organized and financed. Moderate charges. JAMES B. MURROW, 299 Broadway, New York.

Business Opportunities

WANTED
Detailed and itemized bid for drilling 6,000 foot well, Sec. 22, adjoining new RODESSA, LA., well. Lease owner furnishing all permanent fixtures and equipment. WILLIAM MONROE LAYTON, 67 Wall Street, New York City. Copies to Box 768, Shreveport, La.

WE HAVE very interesting possibilities in the development of small oil refineries in the rich agricultural districts of Western Canada, which offer unusual returns. This is not a speculation, but a sound business venture. We have capable engineering and sales staffs, with years of experience in this work in Canada. We are offering to capital an opportunity to join us in expanding this business, which is showing exceptional profits. Address Box G-793, The Oil and Gas Journal, Tulsa, Oklahoma.

Incorporations

CHARTERS — Delaware best, quickest, cheapest, most liberal. Free Forms. Colonial Charter Co., Wilmington, Del.

DELAWARE CHARTERS -Fee small; submitted forms. Chas. G. G.yer, 901 Market Street, Wilmington, Del.

CLASSIFIED DISPLAY RATES

Classified Display is set with a border and may be used in one or two column sizes.

1 Inch	*1 time*	*$5.00*
1 Inch	*13 times*	*4.50 per inch*
1 Inch	*26 times*	*4.00 per inch*
1 Inch	*52 times*	*3.50 per inch*

This space may be contracted for over a period of one year from the date of the first insertion and is PAYABLE IN ADVANCE, MONTHLY

CLASSIFIED RATES

Classified advertising rates: First insertion, 35 cents a line; each additional insertion, 25 cents a line. PAYABLE IN ADVANCE. Six words usually make a line. Count as a word each one-letter word and each group of figures. White space computed at regular line rate. Allow two extra lines for blind ads. Ads of less than three lines not accepted. No formal acknowledgment is made, and proofs cannot be shown in advance of publication.

	1 time	2 times	3 times	4 times
3 Lines	*$1.05*	*$1.80*	*$2.55*	*$3.30*
4 Lines	*1.40*	*2.40*	*3.40*	*4.40*
5 Lines	*1.75*	*3.00*	*4.25*	*5.50*
6 Lines	*2.10*	*3.60*	*5.10*	*6.60*
7 Lines	*$2.45*	*$4.20*	*$5.95*	*$7.70*
8 Lines	*2.80*	*4.80*	*6.80*	*8.80*
9 Lines	*3.15*	*5.40*	*7.65*	*9.90*
10 Lines	*3.50*	*6.00*	*8.50*	*11.00*

We reserve the right to withhold all advertising of questionable character. To avoid delay be sure to send remittance with copy. We will set your ad in the smallest amount of space possible and refund all overpayments. One-time insertions will not be run until fully paid. Forms close MONDAY NOON before each issue date.

THE OIL AND GAS JOURNAL
Tulsa, Oklahoma